DOCUMENT RESUME

ED 178 102 IR 007 892

AUTHOR Caruso, Elaine
TITLE TRAINER Manual for Use with TRAINER: Computer Assisted Learning and Practice Modules. A Textual Representation, Section A: Dialog and Section B: ORBIT.
INSTITUTION Pittsburgh Univ., Pa.
SPONS AGENCY National Science Foundation, Washington, D.C.
PUB DATE Feb 79
GRANT DSI-76-09538; DSI-77-26525
NOTE 266p.; For related documents, see IR 007 891 and IR 007 893 ; Best copy available

EDRS PRICE MF01/PC11 Plus Postage.
DESCRIPTORS *Autoinstructional Programs; Bibliographic Citations; Computer Assisted Instruction; *Information Networks; *Information Retrieval; Information Seeking; Learning Modules; *On Line Systems; *Programed Instruction; *Search Strategies

ABSTRACT

This self-instruction guide for online searching using DIALOG or ORBIT search systems, developed at the University of Pittsburgh, is designed to allow users of scientific and technical information to access databases without an intermediary. The guide is segmented into three parts: the basic TRAINER manual and separate textual representations of DIALOG and ORBIT. The preface to the first part discusses trainee goals and search strategies. Seven practice modules follow: (1) log in procedure at University of Pittsburgh, (2) using direct dial, TYMNET, and TELENET communications networks, (3) basic search commands for DIALOG and ORBIT, (4) database file characteristics, (5) negotiating search terms, (6) using Boolean operators and (7) processing output of search results. Sections on trouble shooting, useful training documents, training files, levels of user proficiency, and exercises are appended to the TRAINER manual. The seven practice modules are expanded in the next packets through examples of emulations for DIALOG and ORBIT to allow the user to practice search skills and develop facility in their use. (SW)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

U S DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

ED178102

BEST COPY AVAILABLE

TRAINER MANUAL

for use with

TRAINER*

Computer Assisted Learning and Practice Modules

* Produced by the
Training Modules for Users of
Scientific and Technical Information
Project
Elaine Caruso, Principal Investigator

February 1979

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Elaine Caruso

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

*Produced at the University of Pittsburgh on the Digital Equipment Corporation KI10 Computer System. This material is based upon works supported by the National Science Foundation under Grant No. DSI 77-26525

IR001892

copyright © 1979 Elaine Caruso

This material is based upon work supported by the National Science Foundation under Grant No. DSI 77-26525.

Any opinions, findings, and conclusions or recommendations expressed in this publication are those of the author(s) and do not necessarily reflect the views of the National Science Foundation.

Inquiries about the availability of TRAINER documents or programs for use or implementation should be directed to the author
440 Second Street
California, Pennsylvania 15419

Before you begin--a word from the author

Learning online searching is no different from any other learning task; the same factors operate: motivation, concentration, application...

One learning principle which seems to apply very strongly in this case is the learn by doing rule. Read a little, try it out, think about it, read some more... Like piano playing--or baseball--you will never learn to do it by reading about it. TRAINER allows you this practice without the expense of operating the full-scale systems.

It is possible to enjoy online searching as a game of wits. Learning the mechanics of the search is equivalent to having mastered the rules; gaining insight into the logic of the programmer(s) who developed the system, the first step. Catching on to the variations in indexing from year to year in the file you use most, and to differences between several files which are useful to you, can be a challenge. Anticipation of terminology which an author might use in a title, or the vocabulary of the abstract; sensitivity to changing senses of meaning of a given term; these capabilities contribute to the skill you can develop. Building just the right combination of search terms, or of sets of terms, so that you glean just what you want, is an act of creative thinking.

When you do get online to the DIALOG (Lockheed) or ORBIT (System Development Corp.) search systems you will be using a major literary resource; upwards of 20,000,000 articles, reports, papers from every field of study are available, as indexed bibliographic records and abstracts. The searching power of the retrieval programs and the clerical copying and ordering functions which the systems perform combine to offer advantages much in advance of the printed volumes they supplant. If you ever go to a library, to the printed record, you cannot afford not to learn to use the online retrieval services.

TABLE OF CONTENTS

What the Hands-on Online Multi-System Multi-Database TRAINER is 1

Trainee Goals--the First Level of Competence ii
(See Also Appendix 4)

Map of TRAINER Modules iii

Strategies for Learning About Online Searching iv

Computer Assisted Learning and Practice Modules 1-50

1 Login (Pittsburgh System). 1

2 Accessing DIALOG and ORBIT through Communications Networks . . 3

3 Basic Search Commands

DIALOG® 9

ORBIT® 14

4 Database File Characteristics 18

5 Finding Related and More Specific Search Terms 31

6 Use of Logical Operators 39

7 Handling Output of Search Results 41

A and B The DIALOG® and ORBIT® Emulators 45

Appendices

1 Login (Pittsburgh System): Trouble Shooting 51

2 List of Useful Training Documents 53

3 List of Files Available on Emulators 55

4 Three Levels of User Competence 57

5 Exercises 61

Index 69

TABLE OF CONTENTS (continued)

Figure 1	Training Modules: General System Flow	iii
Figure 2	Login and R CTLYST	2
Figure 3	Use of TYMNET	6
Figure 4	Use of TELENET	7
Figure 5	Use of DIALOG Emulator	13
Figure 6	Use of ORBIT Emulator	17
Figure 7	Relationship of Files to the Database	18
Figure 8	How a Database is Made Searchable	20
Table 1	Directly Searchable Fields, ORBIT	22
Table 2	Directly Searchable Fields, DIALOG	23
Table 3	Description of Unit Record Standardization, ORBIT	26
Table 4	Implemented Commands for DIALOG and ORBIT Emulators	46-47
Table 5	Commands Not Implemented	48-49

WHAT THE HANDS ON ONLINE MULTISYSTEM MULTI-DATA BASE TRAINER IS:

This is an instructional package, consisting of self-explanatory modules of computer assisted learning and practice (CALP Modules), and emulators of the DIALOG and ORBIT search systems.

The CALP Modules allow you to learn the use of the commands and files of the online services. The emulators allow you to practice using commands and files in a realistic but "protected" environment. Sample files from various data base suppliers can be searched with the emulators, allowing trainees to develop some competence in the use of these files, as well as a fundamental facility with the most used capabilities of the search language.

The purpose of the program package is to bring the complete novice to a first level of competence, as defined on p. ii, and to provide a quick refresher course for the trained but infrequent user of the services.

This manual is intended for use with the CALP modules; it describes and supplements each module. Suggestions for practice on the emulated systems are correlated with the CALP modules, to illustrate the capabilities taught, and take into account the actual content of the files available in the emulator data base. These practice suggestions could be used with the operational online services, if accessible to the trainee, rather than on the emulated services.

A trainee should have the following items in hand, or have access to copies:

1. Trainer Reference Card
2. Trainer Manual (this document)
3. University of Pittsburgh Computer System Login Number
4. DIALOG's Brief Guide to ...Searching, and/or ORBIT Quick Reference Guide

*identified by the services themselves and our own experience. See pp. ii, 46-47.

THE FIRST LEVEL OF COMPETENCE* IN USE OF ONLINE BIBLIOGRAPHIC RETRIEVAL SYSTEMS

The first level is described in its three aspects:

1. The trainee knows and can use the most-used commands* of the service(s) of his choice.

ON DIALOG	ON ORBIT
BEGIN	
.FILE	FILE
?FILES	FILES?
EXPAND	NBR
PAGE	DOWN and UP
SELECT	(Search Statement) FIND
COMBINE (NOT,AND,OR)	AND, AND NOT, OR
TYPE	PRINT SKIP
PRINT	PRINT OFFLINE
END	
DISPLAY SETS	HISTORY
root search (TERM?)	root search (term:)
character substitution	character substitution
LOGOFF	STOP

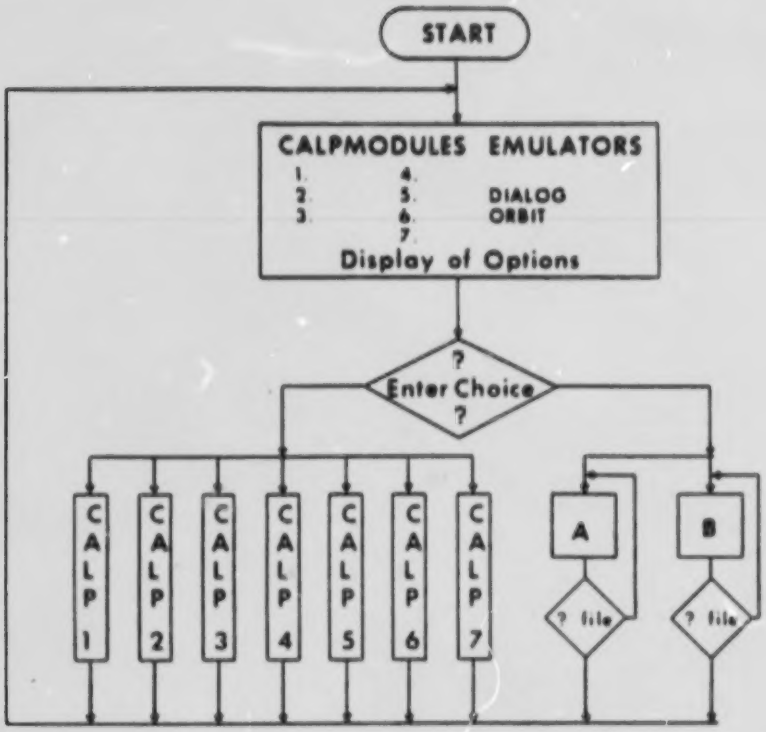
2. The trainee can use the searching and browsing capabilities of the service(s) to retrieve document references of value to him; he can decrease or increase the size of the retrieved document set in a meaningful way by using the logical operators AND, OR, NOT (AND NOT).

3. The trainee knows the data base file(s) most useful to him.

   He can bring it online for searching.

   He can use documentation as provided by the service(s) to determine: (a) which data elements of the records can be directly searched; and (b) whether single word or multi-word terms are included, and whether controlled or uncontrolled indexing is used in the fields he searches.

*Second and third levels of competence, and more complete descriptions of commands implemented and omitted in the emulators, are included in Appendix IV and on pp. 46-49.



GENERAL SYSTEM FLOW

1-7 Computer Assisted Learning and Practice (CALP)
- 1 Login on Pitt system
- 2 Accessing DIALOG and ORBIT through communications networks
- 3 Guided practice of a simple prescribed search
- 4 Database files
- 5 Finding related and more specific search terms
- 6 Combining search aspects using logical connectors
- 7 Formatting and printing results

A-B Emulations of Search Systems
- A DIALOG
- B ORBIT

Choice of database files for search by emulator

Figure 1 Training Modules Online
This is a "picture" or "map" of the TRAINER Programs. Follow the arrows to see the different ways you can move through the system.

STRATEGIES FOR LEARNING ABOUT ONLINE SEARCHING

General -- overall strategies

1. Adopt a facilitating attitude. Consider the dimensions of the learning task and accept the fact that you will need to invest time and concentrated attention to its accomplishment.

   a. You will be perfecting skills, which are largely motor skills;

   b. And performing problem solving which can involve all of your accumulated knowledge, your capabilities to analyze and associate that knowledge, as you work in data base files of new "knowledge" with a new tool, the computer system, for analyzing and associating knowledge.

2. Know that certain teaching/learning techniques have been consciously provided for in the building of the online Trainer, and use them as they suit your own style.

   a. Holistic/serialist learning preferences. Some individuals prefer to browse, explore, jump into the middle of things, and try to figure out "what's going on" by making their own "on the scene" observations; testing them out by self directed experiments and selected references to "authoritative" sources. Fine--the system was planned for this holistic approach. We safeguard you from disastrous approaches by restricting your environment in Trainer. You can begin immediately with the emulated DIALOG or ORBIT systems, searching the reduced data base of nine files; referring to the Manual and system documentation as you feel the need.

      If you prefer a more organized, systematic approach, then the Trainer was set up for you; simply start with the Trainer Manual and follow each module, each set of exercises as directed! We attempt, while keeping the whole process constantly before you, to develop specific aspects of the process in depth, in a sequential, incremental fashion.

   b. For complex concept development we believe conscious "clumping" of simpler concepts is effective. The notions of search term negotiation, of file structure, of logical combination of aspects of a question, are complex constructs. We present each as a set of five to seven simpler notions which, with "overlearning," become <u>one</u> fully-developed complex idea.

c. We believe that motor skills can only be learned by performing them; we provide the online environment, the online search system for unlimited playing and practice.

d. We do <u>not</u> attempt to motivate you to learn. We believe you should bring <u>something</u> to the experience! We are not above suggesting what some motivating factors might be, however!

MAKE IT INTERESTING!

MODULE I LOGIN (Pittsburgh System)

OBJECTIVE: To be able to login to System A of the Pitt Computer System, to "load" and run the CATALYST practice modules (TRAINER, stored at 134057,120121 on the disk).

If you have never used a time sharing computer in the interactive mode, have an experienced user help you for the first session. Once logged in, you may practice the login process, in Module I, until you are comfortable with it.

Getting started on Pitt's Computing System may be the most difficult part of this training program! A good strategy, if your efforts run into difficult areas, is to hold down the CONTROL (CTRL) key and type C to clear the board and start over.

A summary of the login process is given below; your entries are underscored. Everything is important; watch spelling, spacing, and punctuation!

```
.I(CR)     (or ↑C if you are using a dialup terminal)
.TTY SYS A(CR)
.LOGIN      /      (CR)
PASSWORD:      (CR)
.R CTLYST(CR)

Lesson:Section[P,PN]: TRAINER[134057,120121](CR)

>EXIT(CR)
.K/F(CR)
```

Period at beginning of each line is a "prompt" from the System. Use your assigned number to "login" and your own password. Password will not print; keep it SECRET!

The (CR) means that you strike the Carriage Return; this must be done after every entry line, and it quickly becomes habitual.

Figure 2 (next page) is a transcript of a typical Login. See Appendix 1, pp. 51-52, for an annotated transcript of a more complicated instance.

If you are using a dialup terminal, the phone number for the Pitt Computer System is (412) 621-5954; hold down control key (CTRL) and strike the C key instead of using the I.

When you have looked over the Manual and Reference Card, and studied pp. 1-2, you are ready to get online to Module I. Then see Appendix 5, pp. 61-62 for suggestions for extending your login skills. Pages 61-62 also show you how to ERASE a line before you send it, how to INTERRUPT output you don't want to read, etc.

```
.I

PITT DEC-1099/B 603.72 11:06:28 TTY107 system 1240/1237

.TTY SYS A

PITT DEC-1099/A 603.73 11:06:41 TTY107 system 1217/1239
Please LOGIN or ATTACH

.LOG 134057/040736
JOB 21 PITT DEC-1099/A 603.73 TTY107  Mon 15-Jan-79 1106
Password:
Last login: 15-Jan-79 0912
Units remaining: 84.9   Units used: 0.0

.R CTLYST


CATALYST/II

15 JAN 1979      11 07 24.6

Lesson.Section[P,Pn]:TRAINER[134057,120121]

Are you ThomasJ? ( type YES or NO) >YES



STI SERVICES CAL PACKAGE
========================



Type in the number of the module (1 thru 7), or
the letter of the emulator (A or B), or
L to see the list of modules and emulators, or
HELP for an explanation:

EXIT

Total elapsed time for this lesson is 0:0:17.7


EXIT

.K/F
Job 21 [134057,40736] off TTY107 at 1110 15-Jan-79  Connect=4 Min
Disk R+W=177+70  Tape IO=0  Saved all files (54 blocks)
CPU 0:03  Core HWM=12P  Units=0.0217 ($1.63)
```

Notice that PASSWORD does not print.

Figure 2 Login and R CTLYST

MODULE II ACCESSING DIALOG AND ORBIT THROUGH COMMUNICATIONS NETWORKS

OBJECTIVE: To be able to access DIALOG or ORBIT, using direct dial, TYMNET, or TELENET.

When you have read over the material on pp. 3-8, get online to TRAINER, as you did in Module I, and practice entering TYMNET and TELENET accessing procedures.

To access the search system you make use of a telephone connection to the computer or a telephone connection to a data communication network to the computer. In each instance of connecting you need to know:

1. the phone number of the computer or of the network
2. how to identify your equipment and yourself as a qualified user to the network and/or the computer.

No matter which communication path you use, the final "target" system is always the host computer where the search program and data base are stored. At that point you must identify yourself as a unique and qualified user of the search service.

Getting off a system is accomplished by a signal to the host computer, (a typed instruction to LOGOFF or STOP); and a simple physical disconnection of the phone linkage to leave the data communication network.

In CALP Module II you will practice the details of protocols for accessing DIALOG or ORBIT using the TYMNET or TELENET data communication networks. To be sure that you have an overall "picture" of what you are accomplishing we have summarized (1) the actual physical instruments involved, and (2) the steps of the procedures.

The physical connections you establish to reach the data base file you want to search:

1. The telephone is first used to dial a local "port" in a data communications network (TYMNET or TELENET). Find the local phone number in the phone directory, or use the lists given out by DIALOG and ORBIT.
2. Your terminal is connected to the telephone by a modem (acoustic coupler usually). You put the telephone handset in the modem after you have dialed the network number.
3. The communications network has a computer which asks you to identify the kind of terminal you are using and the code or address of the computer you want to be connected to.
4. Then, when the SDC or Lockheed computer comes on line, it will ask for the password you were assigned for their service.

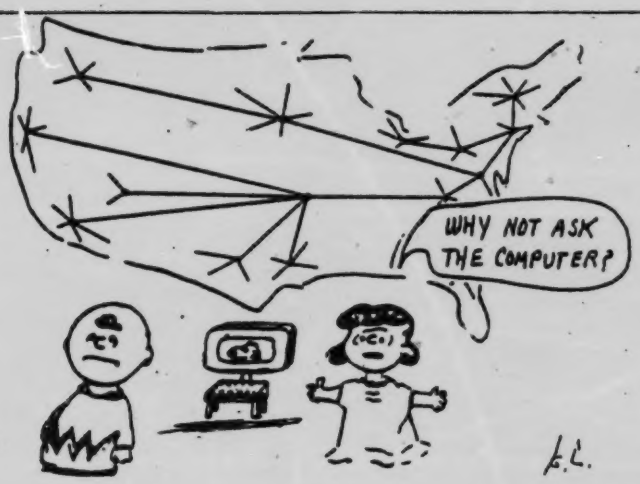
To accomplish these physical connections:

1. Check time schedules provided by the search services, to see if the service and data base file you want are presently available in your time zone.

2. Check tables of terminal types to find the code for your terminal for the network you intend to use. (Use the following pages or DIALOG or ORBIT documentation.)

3. Get the phone number for the local network port (again use the tables provided, or the phone book).

4. Be sure you have the coded address of the search service, and any passwords which have been issued to you by the service you contract with.



You can't "ask the computer" unless it is "up" and "answering the phone"; and of course you need to know its phone number.

Data for Use in CALP Module II

Remember that you must bring 4 items of data to the terminal, when beginning any search session via communications network:

	EXAMPLES
1. phone numbers of local network port	765-1320
2. code for identifying your terminal to the network you will use	E
3. network address, which may include a password or user name, for the service you use	SDC;ORBIT
4. search service password or userid for service to be used	MYWORD

Study the tables of terminal identifiers and the transcripts of network accessing which follow.

Appendix 5, p. 63, suggests some exercises which will extend your understanding of the use of the data communications network, and of factors contributing to costs which will be incurred.

TYMNET TERMINAL MODEL IDENTIFIERS

IDENTIFYING CHARACTER	TERMINAL DEVICE	SPEED-TO-COMPUTER/ SPEED-TO-TERMINAL (CHARACTERS PER SECOND)
A	Datapoint 3300, Infoton, and DigiLog, Hazeltine, and all other CRT terminals All terminals not requiring carriage return or line feed delays CRT Terminals	30/30
B	Model 37 Teletype (see J below)	15/15
C*	Gulton, Syner-Data Tymshare Model 310/311 Beta Univac DCT-500	30/30
D	Model 33 Teletype, Model 35 Teletype, CRT	10/10
E	All thermal printer** terminals; includes Teleterm 1030 and 300, Execuport, Texas Instruments Silent 725, DigiNet, and NCR 260 terminals	30/30

Note: E identifies most 30 cps terminals in full duplex mode for the TYMNET network.

Use of TYMNET to Link with ORBIT

```
PLEASE TYPE YOUR TERMINAL IDENTIFIER
-1063-21--
PLEASE LOG IN: SDC
PASSWORD:
P 34

 YOU ARE ON LINE L80

PLEASE RE-ENTER:  /LOGIN USERID
/LOGIN USERID
```

Ans E was entered, no CR. (does not print)

SDC entered, followed by CR.

ORBIT entered, followed by CR. (does not print)

SDC is online.

Use of TYMNET To Link with DIALOG

```
PLEASE TYPE YOUR TERMINAL IDENTIFIER
-1063-21--
PLEASE LOG IN: LRS;
TC)  HOST IS ONLINE


ENTER YOUR DIALOG PASSWORD
********
```

E entered, no CR.

As a shortcut, we entered LRS, semicolon, DIALOG on one line. (DIALOG does not print)

Here LOCKHEED is online.

17

Terminal Model Identifiers (TELENET)

Enter the identifier for your terminal model in response to the network inquiry TERMINAL= . If the list below does not contain an ID for your terminal, call Customer Service to see if one is available, or simply use one carriage return. In most cases this will work satisfactorily.

Terminal Model	Identifier
Anderson Jacobson 630	AJ63
Anderson Jacobson 830 & 832	AJ83 †
Anderson Jacobson 841	
Applied Digital Data Sys. 520, 580 & 980	ADDS †
Beehive MiniBee 2	BHMB †
Computer Devices CDI 1030	CD30
Computer Devices CDI 1132	CD11 †
Computer Devices CDI 1202 & 1203	CD12 †
Computer Transceiver Execuport 300	CT30
Computer Transceiver Execuport 1200	CT12
Data Products Portaterm	DPRT †
Data Terminal & Communications DTC 300	DT30 †
Datapoint 2200	DP22
Datapoint 3000 & 3300	DP30
Diablo Systems 1550 & 1620	DS16 †
Digital Equipment LA35/36 DECwriter II	DECW
Digital Equipment VT50 & VT52	DECV †
Digi-Log 33 & Telecomputer II	DGLG †
Gen-Comm Systems 300	GS30 †
G.E. TermiNet 30	TN30
G.E. TermiNet 120	TN12

NOTE: Simply hitting the carriage return identifies most 30 cps terminals to the TELENET network.

Use of TELENET to Link with ORBIT

```
                                   ← 2 CR's are sent before
TELENET                              TELENET responds
412 DL5

TERMINAL=                          ← a third CR identifies
                                     our TI terminal
@C 213 33                          ← this is ORBIT's 300ps
                                     address on TELENET

213 331 CONNECTED
/LOGIN USERID                      ← type /LOGIN and
                                     your own USERID
YOU ARE ON LINE LF0
```

Use of TELENET to Link with DIALOG

```
                                   ← again, we initiate the
                                     dialogue by sending
TELENET                              2 CR's
412 DL3

TERMINAL=                          ← a CR to identify the
                                     terminal
@C 415 30                          ← Dialog's TELENET address

415 30 CONNECTED

ENTER YOUR DIALOG PASSWORD
88888888                           ← your own DIALOG password
```

Figure 4 Use of TELENET

Costs per search can vary
from as little as $5.00
to many hundreds of dollars.
See exercises on p. 63 to
learn a bit about control
of those costs.

MODULE III BASIC SEARCH COMMANDS

OBJECTIVE: To learn to use all basic commands without reference to guides for command names or rules for creating statements.

Many useful aids are available from the search services; Appendix 2 lists some of them. The information given below has been selected and abstracted from those aids and from online searches on the system.

DIALOG

DIALOG commands are explained below for previewing and reference. (ORBIT begins on p.14.) When you have read pp. 9-13, get online to TRAINER (see pp. 1-2) and select Module III to practice entering the commands. Then go to Module A, the DIALOG emulator, for practice in using the commands as you would in the Lockheed DIALOG. Suggestions for searches on the emulator are given in the Exercises and Practice Searches for this module, (Appendix 5, p. 64).

Figure 5 on p.13 shows an actual search run on the DIALOG emulator. Refer to it as you read the command descriptions and as you use Module III and Module A (the DIALOG emulator).

1. Lockheed Retrieval Service will assign you a password when you are a contractual user; for practice sessions in the training modules, any entry will be accepted.

2. Logon file 1 - DIALOG and the emulator version of DIALOG will automatically assign a file for you to search when you login.

3. EXPLAIN FILES or ?FILES

   Because this training package does not have the complete data base of the actual service systems, you will not be able to use all of the files available on the larger systems. Before you begin a sample search on any of the simulated systems, you should discover what files are available. Each system has a command for doing this. On the DIALOG system the command is EXPLAIN FILES, or more briefly, ?FILES. The ? is a synonym for EXPLAIN. Notice also that DIALOG puts up a question mark at the beginning of each line to PROMPT you to make some command.

   It is a good practice not to use online time to get any information which can be obtained from printed aids, however! Time is money! Look up the numbers of the files, if you can, before you get online.

This example shows a partial listing from the DIALOG system:

```
? ?FILES

  1  -ERIC RIE CIJE                12  -INSPEC-PHYSICS
  3  -CHEMABS                      16  -PTS CMA&EMA
 11  -PSYCH ABS                    32  -METADEX
 29  -METEOR/GEO ABS               40  -ENVIROLINE
 33  -WORLD ALUM ABS
```

4. BEGIN or B

starts the program with a long introductory exchange; time consuming and of little value. You are given a list of the available files (again!) and asked to choose one. If you know the number of the file you want to use, it is much more efficient to use this variation of the BEGIN command:

5. BEGIN3 or B3

This loads the file numbered 3 for immediate use.

6. The last line of the display of file information tells you:

```
SET  ITEMS  DESCRIPTION
```

See Figure 5, line 6a on the transcript. The headings apply to output given after you enter SELECT or COMBINE commands; a reference number for the document set you created, the number of documents (items) in the set, and a reminder to you of the way you specified the set.

This may cause some confusion; DIALOG should give some thought to a display which would label each element as it is printed; perhaps

```
SET 1    2 pstgs   AIRCRAFT
```

In the "real" system, postings are usually much larger numbers and are less likely to be confused with set numbers.

7. EXPAND or E

When you have no vocabulary aids to help you choose a search term, or if you want to save time in selecting several search term variaions, use the EXPAND command. You will be shown a section of the index.

The procedure would look like this:

```
? ESATELLITE LAUNCHING (or EXPAND SATELLITE LAUNCHING)

REF   INDEX TERM                TYPE    ITEMS   RT
E1    SANDSTORM ----------------        73
E2    SANDSTORMS----------------       124
E3    SATELLITE-----------------      1274    4
E4    SATELLITE CHARACTERISTICS--      347
E5    SATELLITE FUNCTIONS--------      573    3
E6  -SATELLITE LAUNCHING--------       94    2
E7    SATELLITE OBSERVATIONS-----       27
  .
  .
  .
E16   SATELLITES----------------     1293    3
```

E6 is the reference number for the term SATELLITE LAUNCHING which you expanded. There are 94 items in the data base indexed by your term, and two related terms. Listed with your term are 15 other alphabetically related terms that index items in the data base.

8. PAGE or P. This command is used to "PAGE" on through the index, following an EXPAND. If you want to see more of the EXPAND list, type PAGE or P.

9. SELECT or S

Terms may be selected either by typing the actual term, or by using a reference number or a range of E numbers from an EXPAND or related terms list. For example, if you wanted to select the term "SATELLITE LAUNCHING," you could do it either way:

```
? S E6
     1       27     SATELLITE LAUNCHING
? S SATELLITE LAUNCHING
     2       27     SATELLITE LAUNCHING
```

10. COMBINE or C

Remember that terms must be selected before they can be combined, and that the set numbers are used for combining. Suppose that we have selected as follows:

```
? S E4
     1      347     SATELLITE CHARACTERISTICS
? S E7
     2       27     SATELLITE OBSERVATION
```

To combine the 2 sets in an AND relationship, we would proceed as follows:

```
? C 1 AND 2   (or COMBINE 1 AND 2)
     3    12    1 AND 2
```

We have created set 3 with 12 items indexed by both terms: SATELLITE CHARACTERISTICS and SATELLITE OBSERVATIONS.

11. To review the sets you have created type DS or DISPLAY SETS

12. TYPE or T and PRINT or PR

You must specify the set number; you may specify the format to be used and the item number(s) wanted. (A friend, Mary D. tells us she remembers the order of these specifications by recalling the San Francisco Interchange--Set/Format/Item!)

For Example: TYPE 6/2/3

SET NO.=6 FORMAT NO.=2 ITEM NO.=3

TYPE or T is used with a teletype (printing) terminal to have copy printed while you are online. The PRINT or PR command causes your results to be printed offline. (See also pp. 41-42.)

DIALOG Formats are rigid; you may choose from those which are offered but you cannot create your own. They vary somewhat from file to file; you must look at DIALOG's file descriptions to see what is available.

13. END
* 14. .FILE2
15. BEGIN2

Any of these three commands, at the end of a search will finalize any request for an off-line print of search results. END allows you to save the set history for use in a new search of the same file; .FILE2 allows you to retain it and change files; but BEGIN2 erases set history for a new start in another file.

16. LOGOFF concludes the session with DIALOG or the DIALOG emulator. If online to DIALOG, you then hang up the phone and turn off terminal and coupler.

Two successive entries of TRAINER's EXIT command will, first, end the current Module, and second, put up a period at the beginning of a line so that you may use the K/F command to leave the Pittsburgh Computer System.

*The period in ".FILE2" is part of the command name and must be entered on the terminal.

```
1     ENTER YOUR DIALOG PASSWORD>DEC
2               LOGON FILE 1 13:46:35

5     ?>BEGIN 2
                19-Jan-78 13:48:50.1USER DEC
       $0.00      .024 HOURS IN FILE 2
      FILE 2:N.T.I.S.

6                  SET ITEMS DESCRIPTION
                   --- ----- -----------

9     ?>S AIRCRAFT
6a                   1    2   AIRCRAFT

9     ?>S LIGHTNING
                     2    1   LIGHTNING

10    ?>COMBINE 1 AND 2
                     3    1    1 AND 2
12    ?>TYPE3

      AD-A015 174/6SL
       Computer Programs for Prediction of Lightning Induced Voltages in Air
      craft Electrical Circuits.
       Rogers, P. R.
       General Electric Corporate Research and Development Schenectady N Y;A
      ir Force Flight Dynamics Lab., Wright-Patterson AFB, Ohio.
       *Transient radiation effects; *Aircraft equipment; *Lightning; *Compu
      ter programs  Circuits; Electrical equipment; Surges; Magnetic fields;
       AFFDL-TR-75-36-Vol-1
       Apr 75,  161p
       F33615-74-C-3068
16    ?>LOGOFF
      19-Jan-78  13:50:14 USER DEC
       $0.00      .025 HOURS IN FILE 2
      LOGOFF @  13:50:14
```

numbered steps refer to paragraphs in text, pp. 9-12.

Figure 5. Use of DIALOG Emulator

Notice that DIALOG is forgiving about spacing (line 12); if you adapt to its "no spaces needed" readily, it saves online time/costs.

Figure 6 shows an actual search run on the ORBIT emulator. Refer to it as you read the command description and as you use Module III and Module B (the ORBIT emulator).

When you have read pp. 14-17 get online to Trainer (see pp. 1-2), choose Module III, and practice entering the commands. Then, using suggested searches in Trainer Exercises, Appendix 5, choose Module B, the ORBIT emulator, to use the commands as you would in the SDC ORBIT system.

ORBIT BASICS

Before proceeding to explanations of specific ORBIT commands, we will go over a few basic points about interacting with ORBIT. A general warning is in order here: ORBIT is sensitive to spacing: USE SPACES IN STATEMENTS WHERE SHOWN.

1. The ORBIT program will always prompt you when it is expecting an input from you. The usual prompt is in the form:

```
SS N/C?
USER:
```

   Where N is the number that will be assigned to the next SS (search statement or search term) that is typed in, C stands for command. User: means that the system is waiting for input.

```
SS 1/C?
USER:
```

   Means that the system is waiting for you to type in either a search term, which will be designated as SS 1, or a command, C.

2. When the ORBIT program types out a message to you, it will be preceded by the heading PROG:, for example:

```
PROG:
SS 1   PSTG(14)
```

3. FILES?

   This command instructs the program to type a list of the names of all the files that are available to you at the time you are searching.

   It is entered as follows:

```
SS 1/C?
USER:
FILES?
```

ORBIT will respond:

PROG:

YOU MAY ACCESS THE SSIE, CHEMCON, ERIC, NTIS, DEMO NTIS, AND POLLUTION DATA BASES.

YOU ARE NOW CONNECTED TO THE DEMO NTIS DATA BASE.

4. FILE

This command allows you to choose the file you want to search. It can be used at the beginning of a search session to choose the first data base to be searched or it can be used during a session to switch from one file to another.

SS 1/C?
USER:
FILE ERIC

5. NEIGHBOR or NBR

The NEIGHBOR (abbreviated NBR) command is used to find the precise form(s) in which a search term is stored in the data base being searched. The program will find the terms that are identical to, and alphabetically adjacent to the specified term.

6. STANDARD SEARCH TERM ENTRY

ORBIT normally does not use any special command for entering search terms. The normal procedure is to type in the term after the normal system prompt, say, for example, we want to enter the term NUCLEAR RESEARCH.

SS 1/C?
USER:
NUCLEAR RESEARCH

7. FIND or FD

The FIND COMMAND is used to enter a search term or statement in "stacking" commands, i.e., when more than one command is entered on a single prompt. (TRAINER currently does not support stacking.)

SS 2/C?
USER:
SOLAR AND ENERGY; FD 1 OR SOLAR ENERGY

8. LOGICAL COMBINING OF SEARCH TERMS

The ORBIT system has no special command for logically combining search terms. They may be combined as they are entered, or sets previously created may be combined. (See illustration under 7, above.)

If AND or OR is to be used as an actual part of a search term, it must be disguised to prevent ORBIT's using it as a logical connector. Use the # key which means (to ORBIT) that any one character may exist in that position:

```
SS 5/C?
USER:
MARITAL A#D FAMILY COUNSELING
```

9. HISTORY or HIST or HIS

To see a list of your search statements with the number of documents retrieved by each one, use the HISTORY command. You may request display of any one set, a range of sets, or all sets, in historical or reverse order:

```
HISTORY 5
HISTORY 7-15
HISTORY    (gives all)
HISTORY 1-15 REVERSE (to get last sets first)
```

10. PRINT or PRT COMMAND

The ORBIT system uses three "readymade" output formats: PRINT, which displays key bibliographic information (e.g., accession number, title, author, source); and PRINT TRIAL, which displays categories that are subject-related (e.g., title and subject index terms); and PRINT FULL, which displays all printable categories of information.

```
PRT SS 2            PRINT 6 SS 1
```

See Module VII and ORBIT documentation for more complete description of ORBIT's very flexible PRINT command use.

11. SKIP

When you issue a PRINT command you may specify the number of items to be printed; you may request the first 6 items as shown in 10, above:

```
PRINT 6 SS 1
```

If you then want to see 3 more items you must SKIP the first 6:

```
PRINT 3 SS 1  SKIP 6
```

12. STOP

STOP will stop the ORBIT program. Choices for continuing TRAINER or ending the session will be listed for your selection at this point.

```
   HELLO FROM PITT/ORBIT, (10-MAY-78) 13:25 20.2 LOCAL TIME)
   YOU ARE NOW CONNECTED TO THE PAPER CHEMISTRY DATABASE.

   ARE YOU A NEW USER? IF YES ENTER Y, IF NO ENTER N OR A COMMAND.

4→ FILE NTIS

   PROG:
   YOU ARE NOW CONNECTED TO THE NTIS DATABASE.
3{ SS 1/C?
 { USER:
5→ NBR SPACE

   PROG:
   POSTINGS    TERM
      422          SPA/BI
      232          SPACE/BI
     1303          SPACEBORNE/BI
       11          SPACES/BI
     1187          SPACING/BI

   UP N OR DOWN N?
   USER:
6→ SPACE

1→ PROG:
   SS 1  PSTGS (232)
   SS 2/C?
   USER:
8→ 1 AND STATION

   PROG:
   SS 2 PSTGS (82)
   SS 3/C?
   USER:

10→ PRINT TOTAL

   PROG:

   -1-
   AN = N77-32589/8SL
   TI = NASA WORKSHOP ON SOLAR-TERRESTRIAL STUDIES FROM A MANNED SPACE
        STATION
   CC = 04A; 55
   IT = *ATMOSPHERIC PHYSICS; *MEASURING INSTRUMENTS; *RADIATION EFFECTS;
        *SOLAR RADIATION
   ST = *MEETINGS; NTIS/NASA
   SS 3/C?
   USER:
12→ STOP

   PROG:
   ALL DONE? (YES/NO)
   USER:
   YES

   PROG:
   GOOD-BYE
```

Numbered steps refer to paragraphs in text.

Figure 6

Use of ORBIT Emulator

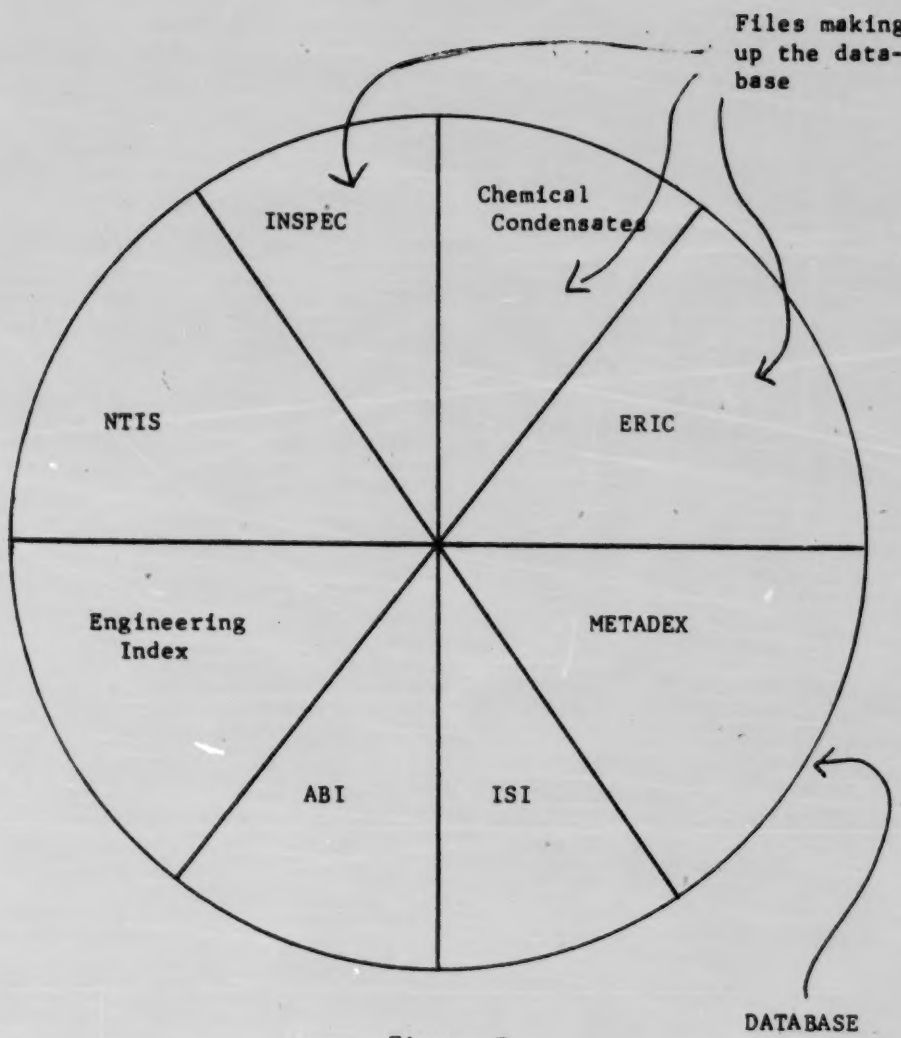


Figure 7

Relationship of files to a database.
The files are the "slices" of the database "pie."

MODULE IV DATABASE AND FILE CHARACTERISTICS

OBJECTIVES:

1. To be able to use descriptions of files

   to choose appropriate file(s) for a particular question
   to discover any characteristics of a chosen file which
   should be observed in making your search:
   directly searchable fields and their names
   fields included in basic(subject) index
   fields which use single-word and/or multiword terms
   to learn how to restrict your search to one or several fields, e.g.,

on DIALOG	AU=NAME,I?	term/TI
on ORBIT	Name, I:/AU	term/TI

2. To be able to use commands to change files during a session and to review the sets created on each file

on DIALOG	.FILEn	DISPLAY SETS DS
on ORBIT	FILE name	HISTORY HIS

3. To be able to check the cost and/or time data of a search (where a search means one question passed against one file). (Costs are sometimes calculated on the basis of "transaction," where one transaction equals one user input and one system response.)

DIALOG	ORBIT
.COST	
END	TIME
.FILEn	TIME INTERVAL (TIME I)
BEGINn	TIME RESET (TIME R)
LOGOFF	

As you read the material, pp. 19-30, note particularly the definition of direct searching, p. 24, the description of the basic index, p. 25, and the discussion of single-word and multiword indexing on p. 27. Then use TRAINER Module IV, and the emulators with the suggested searches in the Exercises for Module IV. (For Module IV you need the file descriptions, reproduced on pp. 22-23, when you go to the terminal.)

INTRODUCTION

The term database as used in the context of online information retrieval refers to a collection of information in the form of reports, journal articles, or other documents. These are usually represented by (1) a bibliographic citation, (2) some descriptive phrases to denote content, and frequently (3) an abstract. A database is made up of files of information from different sources. Each source usually represents a specific domain of science or technology, although this may be interpreted very loosely, especially in the social sciences. For example, a file of all documents found in Chemical Abstracts would be one file in a database. If the file of all documents from Biological Abstracts were added to the Chemical Abstracts file, a database with two files would exist. Thus a database is a collection of information from different sources which is made accessible via one computer system. A file usually covers only one discipline such as chemistry, physics, or electronics.

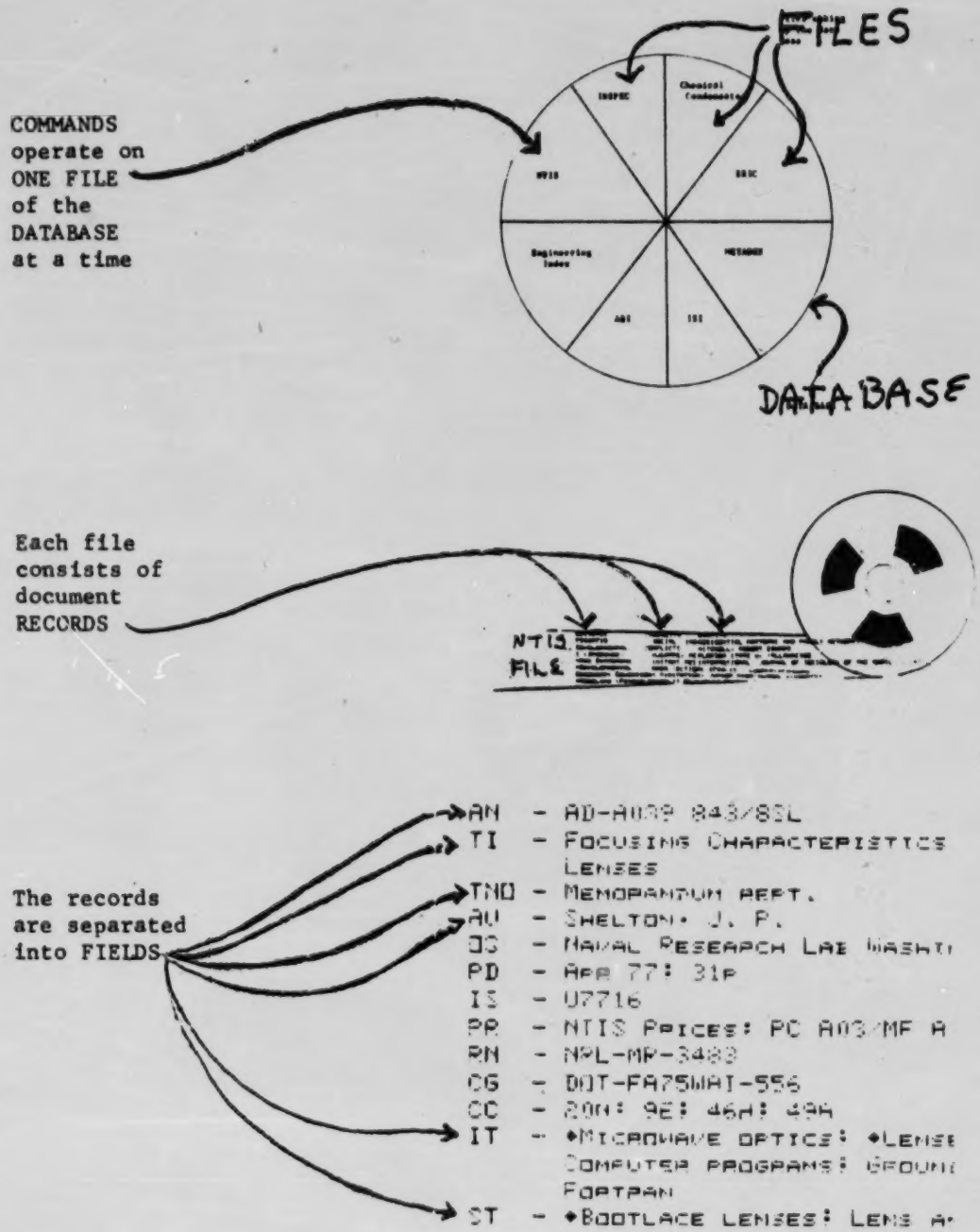


Figure 8

How a Database is Made Searchable

The process of searching a massive database (as many as 20 million document records) is made possible by limiting the search to specific fields of one specified file at a time. Results of several field searches may then be combined, but searches of several different files cannot.

These files are usually organized in such a manner as to permit identification by subject matter or author. A printed index can be entered at relatively few access points, such as author, title, and subject. On the other hand, a machine readable data base can be accessed by almost any word in the record including single words anywhere in the title, or abstract, or even date and place of publication. One advantage in searching a machine readable version on a computer, which makes computer searching a different process than just a mechanized version of the manual search, is the capability of performing a "complex" search. A complex search might require retrieval of only those items on subject A and subject B or subject C produced by a specific organization after a certain date. To perform this search manually would take hours on only a small index, if indeed it would be possible, whereas the same search performed on a computer takes only a few seconds.

Consider the case of a search for a coal gasification process for electric power generation developed by Westinghouse. The first step in a manual search would be to find all entries under either "coal gasification" or "electrical power generation," whichever gives the shortest list of entries. These would be scanned to glean only those identified as originating at Westinghouse, and, if titles are helpful, those which also treat of electric power generation. A similar scan of entries under electric power generation might yield a number of the same documents, and some additional titles. Those which appear on both lists are "hits," really on target. However, given the known space constraints on printed indexes, it is quite possible that some useful documents treating of both subject aspects were listed only under one or the other topic; to be sure, you must read the abstracts if given, or look at the original documents.

In a machine search all three search specifications are applied at once and a single list of references is presented to you; further, the abstract and a more complete subject analysis may also be checked for the three aspects.

CHOOSING A SEARCH SERVICE: DATA BASE CONSIDERATIONS

One of the first attributes of a search service to be noted is whether it offers access to the file(s) you need to use, and the hours when it is available each week. The second is to discover what time span of the file is kept online for immediate search and online printout of results; and how quickly new issues of the file are added to the data base. Documentation provided by the services, in printed form, and as online messages, provides this data. Less obvious, but equally critical, are questions about the treatment of the bibliographic data elements of a file when it is processed into the search service database.

HOW FILE TREATMENTS VARY

Thus far our main concern has been that of becoming familiar with various system search procedures. It is not enough, however, merely to know the procedures for the system that you are working on. For most efficient searching you must also be quite familiar with the file that you are searching on and

ERIC RECORD DESCRIPTION

SEARCH QUALIFIER	ELEMENT NAME	PRINT/STRS QUALIFIER	STANDARD PRINT COMMANDS		
			PRINT	TRIAL	FULL
--	Basic Index *(single words from TI, IT, ST, AB)*	--	-	-	-
/IT	Index Terms *(IT and ST)*	IT	-	X	X
/IW	Index Term Words *(single words from IT, ST)*	--	-	-	-
(IN IT)	Supplementary Terms	ST	-	X	X
/TI	Title	TI	X	X	X
(IN BI)	Abstract	AB	-	-	X
/AN	Accession Number	AN	X	X	X
/FS	File Segment	--	-	-	-
/CHAN	Clearinghouse Acc. No.	CHAN	-	X	X
/CC	Category Codes	--	-	-	-
/AU	Authors	AU	X	-	X
/OS	Organizational Source	OS	X	-	X
/SPO	Sponsoring Org. Source	SPO	X	-	X
/JC	Journal Citation	--	-	-	-
Ranging	Publication Year (PY)	--	-	-	-
/IS	Issue	IS	X	-	X
/NU	Numbers	NU	-	-	X
/LPA	Legislative Prog. Area	LPA	-	X	X
/DT	Document Type	DT	-	X	X
--	Source *(includes JC and PY)*	SO	X	-	X
--	Availability	AV	X	-	X
--	Notes	NO	X	-	X

(Educational Resources Information Center *(continued)*

NTIS RECORD DESCRIPTION

SEARCH QUALIFIER	ABBREVIATION	PRINT/STRS QUALIFIER	STANDARD PRINT COMMANDS		
			PRINT	TRIAL	FULL
--	Basic Index *(single words from Titles, Index Terms, Supplementary Terms, & major Index Term words with asterisks)*	--	-	-	-
(IN BI)	Index Terms	IT	-	X	X
(IN BI)	Supplementary Terms	ST	-	X	X
(IN BI)	Title	TI	X	X	X
/AN	Accession Number	AN	X	X	X
/AU	Authors	AU	X	-	X
/OS	Organizational Source	OS	X	-	X
Ranging	Publication Year (PY)	--	-	-	-
/IS	Issue	IS	X	-	X
/SPO	Spons. Org. Ac./No.	SPO	X	-	X
/NU	Numbers	NU	-	-	-
	Report Numbers	RN	-	-	X
	Project Numbers	PN	-	-	X
	Task Numbers	TN	-	-	X
	Contract/Grant Numbers	CG	-	-	X
/CC	Category Codes	CC	-	X	X
/UP	Update Code	--	-	-	-
STRS ONLY	Title Annotation	TA	-	-	X
STRS ONLY	Title Note	TNO	X	-	X
STRS ONLY	Pagination/Date	PD	X	-	X
STRS ONLY	NTIS Prices	PR	X	-	X
STRS ONLY	Availability	AV	X	-	X
STRS ONLY	Notes	NO	X	-	X
STRS ONLY	Abstract	AB	-	-	X

National Technical Information Service *(continued)*

Table 1 ORBIT Treatment of ERIC and NTIS Files Compared

ERIC

RETRIEVAL METHODS

SUBJECT OR TEXT SEARCHING		
SUFFIX	FIELD NAME	EXAMPLES
None	Basic Index (includes all fields listed below)	E CURRICULUM $ CHEMISTRY $ CHEMISTRY(F)TEACHING $ SCIENCE(F)EDUCATION
/AB	Abstract	$ NEGRO(W)COLLEGES/AB
/CS	Corporate Source	$ SERVICES(1W)EDUCATION(F)WASHINGTON/CS
/DE	Descriptor[1]	$ PHYSICAL SCIENCES
/ID	Identifier[1]	$ THIRTEEN(W)COLLEGE(W)CURRICULUM/ID
/NT	Descriptive Note	$ APPENDIX/NT
/SA	Sponsoring Agency	$ NATIONAL(W)INST(1W)EDUCATION/SA
/TI	Title	$ CURRICULUM(W)PROGRAM/TI

[1]Also /DE*, /DF, /DF*, /ID*, /IF, /IF*.

CODE SEARCHING		
PREFIX	FIELD NAME	EXAMPLES
AC=	Legislative Authority Code	E AC=56 $ AC=95
AU=	Personal Author	E AU=BOOKER, E $ AU=BOOKER, EDWARD
CH=	Clearinghouse Code	E CH=VT $ CH=SE
CN=	Contract/Grant Number	E CN=OEC $ CN=OEC-0-8-07867-0001
DT=	Document Type	E DT=B $ DT=C
GC=	Group Code	E GC=110 (CURRICULUM) (EXPAND only)
IS=	Issue	E IS=CIJEDEC74 $ IS=RIEAPR76
JO=	Journal Name	E JO=AAUP $ JO=INTERCOM
PN=	Bureau/Project Number	E PN=BR $ PN=BR-7-0867
RN=	Report Number	E RN=B $ RN=B-1897
SC=	Corporate Source Code or Sponsoring Agency Code	E SC=FGK $ SC=FGK37812 E SC=BBB $ SC=BBB0421
UD=	Update	E UD=7512 $ UD=7604
YR=	Year	E YR=74 $ YR=76

LIMITING		
SUFFIX	FIELD NAME	EXAMPLES
acc.nos. /ED	ED Accession Number Subfile (Includes ED002747 to present)	L1/ED0-80788-095253/ED
acc.nos. /EJ	EJ Accession Number Subfile (Includes EJ000001 to present)	L3/082165-101872/EJ
/ED	Non-periodical Literature Subfile	L4/ED
/EJ	Periodical Literature Subfile	L8/EJ
/AVAIL	Document Available from EDRS	L6/AVAIL
/UNAVAIL	Document Not Available from EDRS	L14/UNAVAIL
/MAJ	Major Descriptor or Identifier	L7/MAJ
/MIN	Minor Descriptor or Identifier	L9/MIN

FORMATS AVAILABLE

Format 1	Accession Number
Format 2	Bibliographic Citation
Format 4	Abstract and Accession Number
Format 5	Full Record
Format 6	Title and Accession Number

NTIS

RETRIEVAL METHODS

SUBJECT OR TEXT SEARCHING		
SUFFIX	FIELD NAME	EXAMPLES
None	Basic Index (Includes all fields listed below)	$ AMORPHOUS(W)STATE $ SUPERCONDUCTING(F)INTERACTIONS
/CS	Corporate Source	$ WESTINGHOUSE(W)ELECTRIC/CS
/DE	Descriptor[2]	$ SEMICONDUCTOR MATERIALS[1] $ SWITCHES/DE
/ID	Identifier[2]	$ AEC/ID
/TI	Title	$ SEMICONDUCTORS/TI

[1]Selection of a bound phrase (multi-word term) defaults to the Descriptor field only.
[2]/DE* retrieves major descriptors; /DF retrieves single-word descriptors; /DF* retrieves major single-word descriptors; and /IF retrieves single-word identifiers.

CODE SEARCHING		
PREFIX	FIELD NAME	EXAMPLES
AU=	Personal Author	E AU=JONES, C. $ AU=DEIS, D. W.
CC=	Corporate Source Code	E CC=880 $ CC=8808000
CF=	COSATI Field	E CF=80N $ CF=20L
CN=	Contract Number	E CN=NASW $ CN=NASW-1760
CP=	Contract No. Prefix	E CP=NAS $ CP=NASW
JA=	Journal Announcement	E JA=N28 $ NA=N2805
RN=	Report Number	E RN=NASA-CR $ RN=NASA-CR-129534
RP=	Report No. Prefix	E RP=NAS $ RP=NASA
UD=	Update	E UD=7502 $ UD=7506

LIMITING		
SUFFIX	FIELD NAME	EXAMPLES
None	Accession No. Range	L5/A6715G2-A5942H1 L2/C5148G2-C557184
/MAJ	Major Descriptor or Identifier	L18/MAJ
/MIN	Minor Descriptor or Identifier	L9/MIN

FORMATS AVAILABLE

Format 1	Accession Number
Format 2	Bibliographic Citation
Format 4	Report Number
Format 5	Full Record
Format 6	Short Citation (report number, prices, title, note, date)

Table 2 DIALOG Treatment of ERIC and NTIS Compared

with the way that it is represented on that system. One database file can differ from another on a single system as to which fields or categories are indexed and directly searchable, and in indexing policies as well. (See Tables 1 and 2 for comparison of ERIC and NTIS database files as represented in the DIALOG and ORBIT databases.)

Fields which are considered useful in locating a particular document or retrieving documents on a particular subject are usually "directly" searchable. This means that you may enter a search term and have the system look for matches in an index of terms occurring in that field. Author names, descriptors, words from titles are usually directly searchable. Fields not directly searchable, that is, not indexed by the service, may be searchable "indirectly." For example, a search on year of publication may make little sense as a "direct" search approach; however, as a way of limiting a too large output it can be very useful. "Full-text" searching of the abstract, when it is not indexed for direct searching, may also be available as a way of refining a previously executed search. Only direct search procedures are included in TRAINER, but you may want to check full text searching as a way of handling some searches; see service documentation for details.

A search service may decide to treat a particular category of bibliographic data differently on several files: multiword index terms may be used exactly as supplied on the ERIC tapes, for example, while terms on the NTIS tapes may be separated by the search service into single-word entries only (ORBIT IV). Such decisions vary more unpredictably between the several services.

From the two listings, pp. 22-23, you can see differences in the ways the NTIS file is represented on the two different systems. For example, the ORBIT system allows direct searching by Accession Number, while DIALOG does not. DIALOG, however, allows direct searching for words occurring in the Title, while ORBIT does not. Note also that, although the directly searchable categories are similar on the two systems, the abbreviations for them are often different (e.g., Update is UD= on DIALOG, but is is /UP on ORBIT).

NAMING OF DATA ELEMENT FIELDS

A little study of Tables 1 and 2 reveals some interesting comparisons. DIALOG fields seem to be more consistently named; ORBIT seems to reflect more closely the naming used by the file originator in the earlier, printed versions of the index. This consistency from printed version to computer-accessed version of a file has some value, especially when the tape file is used as an adjunct to the printed volume. However, as the tape file has become more complete and more used as the primary form of the file, this becomes less useful and the inconsistency in field names from one file to another becomes a more negative characteristic. ORBIT developers have recognized this shift, and in the latest revision of the system, ORBIT IV*, have made a major effort to standardize field names used in the various files of the ORBIT data base. Some variation from file to file cannot be eliminated, of course; the files just do not all provide the same elements of data.

*See p. 25, ORBIT IV, and Table 3 on p. 26.

ITEM DESCRIPTION VS CONTENT DESCRIPTION

Another very important difference is in the treatment of (1) the bibliographic data elements which identify a record as a specific, unique item (item description data) and the (2) data elements which relate the subject content of the item to other items on the same subject in the file (analysis of item subject content). DIALOG clearly distinguishes the elements which can be used to isolate an item, as PREFIX or coded fields; those which integrate the content of the item with the subject content of the file are SUFFIX fields.* Examples:

Prefix	AU=Jones,A	Suffix	Media/AB
Prefix	JO=Prin. Mathematics	Suffix	Glucose/DE

The basic index to files in DIALOG data bases includes all subject fields; the prefix fields are put into separate index lists of, for examples, authors, corporate sources, journal names.

ORBIT, on the other hand, made an early decision to include all data elements in one interfiled index; author names, title words, words from abstracts, indexer assigned descriptors being all interfiled in one list. This practice relieved the person searching of extra effort when putting in search terms. Again, as in the instance noted earlier of naming data elements to correspond to usage in printed versions of a file, what was first seen as an advantage has become a liability. As file sizes increased, the inclusion of all fields in one list caused problems, e.g., in retrieving items by the National Institute of Mental Health which were on many subjects other than mental health. And, once again, ORBIT has responded to changing needs.

ORBIT IV, the March 1978 version of SDC's service, uses the basic subject index approach; with other fields indexed in separate lists. This is a needed change; and since it is so much like the DIALOG file structure it facilitates multisystem search skill development.

A problem arises, however, which illustrates the difficulty, already well known in more traditional library systems, of making overall changes in the organization of a large data base. The costs and time involved in making this change have caused it to be implemented selectively; only some of the database files are organized into a basic subject index, with associated author, journal name, etc., indexes. Only current issues of a revised file may be available in the new structure; older file segments must be searched with the original single alphabet structure.

---

*The origin of this file structure is almost certainly due to more mundane considerations relating to search efficiency! The prefix fields yield much shorter indexes: one index entry per document in many instances (corporate source, issue, project number), and since there is less variation than occurs in subject vocabulary, the index entries lend themselves to the efficiencies of"coding" techniques. Removing these (less-used?) fields from the subject index helped to reduce the size of that file. Some distinctly subject fields (e.g., COSATI codes) seem to have been placed in "prefix fields" purely on the basis of codability, however, indicating that descriptive vs subject analytic was not the decision factor.

All search services recommend that each database user refer to the data base documentation they provide before attempting an online search! ORBIT, in particular, requires careful study of latest available file descriptions. While it is attempting to reduce the complication by standardizing the names of the directly searchable fields to a more manageable set, as noted in Table 3, there are the conventions of the older structure and of the ORBIT IV organization to be taken account of.

Table 3

*Description of Unit Record Standardization, ORBIT**

Kind of Bibliographic Information	*The Standard*	
	Name	*Abbreviation*
Unique record number	*Accession Number*	*/AN*
Title of source document	*Title*	*/TI*
Un-translated titles, if in separate category	*Original Title*	*/OTI*
Personal Author Names	*Authors*	*/AU*
Organization information, including author affiliations, corporate sources, corporate authors, etc.	*Organizational Source*	*/OS*
Sponsoring Agency or Organization	*Sponsoring Organization*	*/SPO*
Journal or Source Document Citation Information	*Source*	*/SO*
Corresponding Printed Publication References	*Issue*	*/IS*
Subject classification systems, either names or codes or both	*Category Codes* *Category Codes/Names* *Category Code Names*	*/CC*
Classification system for types of source documents	*Document Type*	*/DT*
Definable segments (different groupings of records within a data base)	*File Segment*	*/FS*
Subject terms that are searchable	*Index Terms*	*/IT*
To restrict a single word search to the index term fields only		*/IW*
	Language	*/LA*
	Location	*/LO*
	Abstract	*/AB*

**Revised to reflect ORBIT IV, as documented to 3/1/78.*

RESTRICTING YOUR SEARCH TO A PARTICULAR FIELD OF BIBLIOGRAPHIC DATA

If you are not sure which field or category of data to search, and fail to specify any when you enter the search term, the search system will accept the term. This is called a "default" condition; the term will be checked against all or part of the indexes, depending on the system in use.

DIALOG and ORBIT IV look for your term, when you "default," in a basic index consisting only of subject identifying fields. Thus, an author name cannot be matched if you enter it without specifying the "prefix" field, AU=(DIALOG), or using a "qualifier," /AU(ORBIT), because it will be checked against the basic (subject) index.

If you know what the "default" condition is (as noted above) you can search quite competently with no further concern about qualifying your search terms. To use the various term qualifiers effectively requires much more effort and understanding. Other than the obvious meaning of field searching for AUTHOR, CORPORATE SOURCE, REPORT NUMBER, can you be sure what the effects of restricting your search to DESCRIPTOR or TITLE or IDENTIFIER fields might be? Thoughtful experiences will give you confidence--together with careful study of the data base in use, and of the conventions of the service which supports it. Be especially alert to these field or "category" attributes, because they materially affect your search results:

1. Does the field include (a) only single word entries, or (b) does it include both single and multiple word entries as assigned by an indexer, or (c) does it include both the single word terms and multiple word terms as assigned by the indexer, plus single-word terms derived from the separated multiword terms, and perhaps from title and abstract as well? Policies vary between systems; and within systems, it may vary from file to file.

Imagine a very small file consisting only of one document "Nutrition Aboard Space Stations." An indexer after reading this document might assign the following terms describing the document: Doc. 1 food, nutrition, space stations, space. If this document constituted the NTIS file DIALOG would call these terms "descriptors" and construct the following index for the computer to search: food, nutrition, space, space stations, stations. ORBIT would call the terms "index terms" and construct the following index: food, nutrition, space, stations.

The problem occurs when you get accustomed to DIALOG satisfying your request for "space stations" and you try ORBIT which mysteriously reports "no postings" for the simple reason that these are no two-word index terms in the file. On ORBIT NTIS therefore, you must enter "space and stations." Each indexing scheme has advantages and disadvantages. The point is that you must familiarize yourself with a particular system's file before using it.

2. Does the field include controlled vocabulary indexing, terms derived from text (titles, abstracts) or freely assigned index terms? or a combination of practices?

To restrict your search to a particular field, use the abbreviation of the data element field names, as given in the file descriptions. Examples:

DIALOG	ORBIT
AU=JONES, J.G.	JONES,J.G./AU
LASER/TI	LASER/TI

Skip no spaces in attaching search term prefixes or suffixes on either system. Spacing and punctuation within a data field is entirely determined by the supplier of each file. You must check file descriptions. This is especially critical in author name searching.

SEARCHING IN MULTIPLE FILES

Many questions can be searched with good results in more than one file of a data base; consider the overlap in coverage between NTIS and Compendex for instance. You should know the commands which can be used to change from one data base file to another; and how to save search histories, to aid you in constructing a new search for the second file. You must be prepared to restructure your search statement, however, to reflect differences in indexing between the two (or more) files, and the possibly different way the search service creates the indexes. The most immediately observable critical variation between files on the data base of any given search service, will be in the way they use the multiword descriptors as assigned by the creators of the file: in some cases such phrases are retained exactly as given; in other cases they are used only as the separate single words; in other cases they are used both as the multiword phrase and also as single words. You must check the latest file description to know this. (More on term negotiation problems like this in Module VI.) Other differences occur as well, as noted earlier in this text. We mention it here, because of its particular effect on the creation of searches to be run against several files.

In both DIALOG and ORBIT there are specific commands, to be used in changing files during an online session:

in DIALOG	.FILE(number)
in ORBIT	FILE(name)

The DIALOG .FILEn command will bring up the newly requested file, while retaining the history of your previous search. Thus, you can use the DISPLAY SETS (DS) command to remind you of the steps in the earlier search, after you get onto the new file. (They will not be active, however!)

The ORBIT FILEname command brings up the named file and erases all previous search statements; if you want a concise summary of the just completed search, you should use the HISTORY (HIST,HIS) command before changing files.

Cost Control

Again we raise the problem of controlling the cost of your search; because for one thing, it is (or should be) constantly a part of your online consideration, and second, because the FILE change commands just introduced above, also give you information which is useful in assessing your expenditure.

The DIALOG .FILEn will give you both time figures (in decimal hours) for the file you just left, and the "file connect" charge in dollars. Cost of any offline printouts will be given. If you are using a data communication network, it will give you the network charges, and total the charges. A .FILEn might give all of the following:

```
.FILE9*
          3NOV76    16:11:25   User 6061
$1.45     0.058 Hours in File1
$0.46     Telenet
$3.00     30 prints
$4.91     Estimated Total Cost
```

Other DIALOG commands which give the same cost data include:

```
BEGINn    --also erases set history
LOGOFF    --also disconnects you from DIALOG!
```

All of these (above) DIALOG commands give you time and cost data, accumulated since the last cost message; all reset accounting data to zero. A special command, .COST, will give you an interim accounting, without resetting cost figures:

```
.COST
          3NOV76    16:11:25   User 6061
$1.45     0.058 Hours in File1
$0.46     Telenet
$1.91     Estimated Partial Cost
```

If you want to mark the end of a search on your typeout, without making a visible cost statement or changing files, use: END to get date and time and file name data.

If you are using ORBIT, you can get timing data, and since time/money are correlated, you can estimate the charges as they accumulate. The elapsed time from login (or the previous TIME RESET (TIME R) is given whenever you change files, or when you request it. Time related commands are:

TIME -- to get the time of day and date
TIME INTERVAL (TIME I) -- to get the elapsed time (i.e., the interval of use)
TIME RESET (TIME R) -- to get elapsed time and reset timer to zero

*Periods, when shown preceding a command word, are part of the command name and must be entered on the terminal.

Review and Summary to END of Module IV

In Module I we showed you how to use the University of Pittsburgh computer system; in Module II, we gave you the protocol for reaching the S.D.C. and Lockheed computers. In Module III, you practiced entering the most used searching commands, and made some searches, using them.

In Module IV we introduce the notion of the bibliographic data base, where many bibliographic files from different sources are brought together and processed so that the same searching program can work on all of them. This processing includes deriving "index terms" from title, note, abstract, and other fields; it may change the indexing done by the suppliers of the files by deriving single-word index terms from any multiword terms. It puts specific short labels on each of the categories of bibliographic data in the document records which make up the file. Thus, a file which is received by all systems in an identical form may show some differences when it becomes a part of the data base of each particular search system.

Searches of bibliographies tend to be of two kinds:

1. A search for a particular known document, or, more usually

2. A search for any document(s) on a particular subject.

The indexing and organizing of the data base files in all systems tends to reflect this pattern. All "subject" related fields are included in one basic index; whereas fields which are more useful in identifying particular documents (or classes of documents) are put in separate indexes: author, country of origin, report number, journal name, etc.

Some fields not considered economical or useful for searching may not be indexed at all; examples: pagination in the source journal, prices of items available for purchase, notes or annotations or abstracts. You must read the individual search service's documentation of each file to determine which fields may be used in searching.

The usual practice, as in DIALOG and in ORBIT IV, is to expect most searches to be of the subject type; and unless you qualify your search term when you enter it, as author, update code, journal, . . . it will be looked for in the basic index of subject words only.

For the CALP MODULE IV you need the descriptions of data base files provided by the search services you choose to study. For convenience some DIALOG and ORBIT-provided descriptions are included in the TRAINER Exercise pamphlet. Take them to the terminal with you.

MODULE V NEGOTIATING SEARCH TERMS ONLINE

Here we look at the process of arriving at the precise search term, after you are online to the search service.

OBJECTIVE: To be able to use the browsing capabilities of the search system, effectively--and economically--to arrive at an accurate and succinct statement of the question being searched. This includes specific skills in viewing parts of alphabetical indexes and thesauri, and in interpreting and using the resulting displays effectively; and in using truncation and character substitution appropriately, knowing when it is really useful.

This Module will teach you:

(in DIALOG) to use the commands to EXPAND and PAGE the index; to use the resulting displays to cut down on search term entry time; to truncate terms using ?; and to substitute ? for one or more embedded characters.

(in ORBIT) to use the commands to NBR and to move UPn or DOWNn in the index; to use truncation, the MULTIMEANING displays which result, and the ALL qualifier; and to use : for any number of characters within a term or following a stem, and # for one character wherever it is used.

INTRODUCTION

Choosing the best search terms for your search is difficult; this becomes obvious to you very quickly when you get online. Why it is difficult is not so obvious, however. Before you get "into searching" you need some guidance, some understanding of the nature of the difficulty, lest you give up out of frustration, or alternatively, proceed in a hapless, hopeful mode, rather than with an intelligent strategy.

If you are studying both ORBIT and DIALOG at the same time, you may have decided at this point that they are very similar; any differences in use of the basic commands can be readily adjusted to; and different names or labels for the categories of bibliographic data can be equated. If you've used only two or three files you will soon remember which service uses single words only in indexes for particular files. This assumption of similarity is valid; however the differences in the way the browsing commands work in the two systems, and in the displayed information they provide, are very important to efficient searching.

For this reason we suggest you concentrate on one system exclusively until you are quite familiar with the use of browsing and truncating capabilities. The use of DIALOG in search term negotiation continues below; see p. 35. for ORBIT text.

NEGOTIATING SEARCH TERMS IN DIALOG

The most economical and effective searching occurs when the file you are using is indexed by controlled vocabulary, and your question can be satisfactorily expressed using that vocabulary. (Supposing, of course, that you have access to the thesaurus used.) Just SELECT the term(s), and qualify them as /DE:

S ADHESIVES/DE

If you use a multiword term, you don't need to qualify it, as multiword terms only occur in index term fields, and DIALOG automatically restricts the search to index terms:

S TRADE RELATIONS

If you are confident that a search term is useful (i.e., expresses your need, and is likely to occur in the file), just enter it:

S PLASTIC

If you are a little unsure, say of the exact form, truncate as you select:

S GERM?

This will pick up any ending; you need to be fairly sure of the term and its meaning in the file, because you cannot know the actual terms you might be retrieving on: GERM, GERMAN, GERMINATE, GERM WARFARE.

In cases of such uncertainty, use the command which brings up a portion of the index:

EXPAND SPACE STATION

You have used the EXPAND command in other exercises, and are familiar with the display: a list of alphabetically close terms, each assigned a number, E1 thru E-51, if you use the PAGE command to extend the list. You can use the "E numbers" in SELECT commands of these forms:

S E1 SE1,E3,E5 ~~SE3-7~~ SE3-E7

Each of these forms results in a single set of retrieved references.

EXPAND commands can be used with terms with prefix restrictions as well:

E AU=ANDROSCH, D.R.

For proper names the EXPAND command is most useful; variations in practice for name entry are very difficult to anticipate.

ASSESSING PRELIMINARY RESULTS

As you enter each of your search terms, using the techniques just listed (precise controlled vocabulary, truncation, and viewing the index), you will be given a figure for the number of postings for each term. Note in particular the extreme cases: if you get zero or one hit for instance, or at the other extreme, thousands of postings.

If you get zero postings, and your term was in any sense appropriate to the file, try another form for it, or truncate it. (RABBIT might not be used, but RABBITS may be), or EXPAND it. A posting of 1 in any real file almost certainly indicates some misspelling of a useful term.

On the other hand, an extremely large number of postings indicates that the term entered is too general to be useful if used alone; you must change it to a more specific word or use it as it intersects with other terms which represent another aspect of your search. See Module VII, Logical Combination, for guidance here.

ROOT SEARCHING AND CHARACTER SUBSTITUTION

When a subject search is made on fields which do not use controlled vocabulary (such as title words, abstract words, and sometimes assigned index terms), you will want to provide for matching all variations of spelling and word endings. In DIALOG, use the ? in three ways:

--any number of following characters--

S CENT? This SELECT will retrieve on any index term from CENTAUR to CENTURION, in addition to the target subject: CENTER, CENTRE, and plurals CENTERS, CENTRES.

--specifies upper limit to following characters--

S CENT??? ? This will retrieve any word beginning CENT (including CENT), with up to 3 following characters.

S CENTRAL??E --each ? stands for one character--
This will retrieve matching words having any character at the 9th character position

There is no way to cover such words as CESIUM/CAESIUM since each embedded ? must be replaced by one character in the matched term.

GENERATING GOOD MULTIFIELD SEARCH TERMS: DIALOG

The policy used by DIALOG in creating its basic index, is to use as many single word index entry terms as possible, to make search term selection easier. By providing as many entry points to the index as possible, it is more likely that the searcher will get hits. If the indexer-assigned term is SPACE STATIONS, you can find it whether you search for "space" or "stations" or "space stations"in the basic index.

We have told you that the quickest, cheapest search is made by using the exact form of a controlled vocabulary* index term. When all items in a file are consistently indexed using the same vocabulary, this is also the most effective search; it can be relied on to retrieve all useful documents on the topic. If documents are indexed by different vocabularies (as NTIS documents are), or if you didn't find specific controlled vocabulary terms which were useful, you will want to search all the subject fields available instead of one specific field.

The strategy, to be sure you miss nothing, is to search each single word of your search term:

S SPACE; S STATIONS (generating Set 1, Set 2)

and then to combine them as aspects of a question

COMBINE 1 and 2

This will assure you of missing no items on SPACE STATIONS, <u>but</u> will generate some <u>false associations</u>: You will get articles on SPACE assignments in railway STATIONS, for instance. To avoid this you could use one of the DIALOG "full-text search" operators: W, which is a mnemonic for WITH. It is used with or without field qualifiers:**

S SPACE(W)STATIONS S SPACE(W)STATIONS/TI

to require the two terms to be adjacent and in the order given.

Review Module IV for further help with data base considerations which affect search term selection.

---

*a limited number of explicitly listed subject headings are used in assigning index terms to a document

**full-text searching is not available in the emulated systems

NEGOTIATING SEARCH TERMS IN ORBIT

As in the DIALOG system--if you can find terms from a controlled vocabulary source, which express your question well--this is the most efficient searching. Again, be sure if you use a search term consisting of more than one word (e.g., FERMI RESONANCE), that the file allows multiword index terms. See Module IV, p. 21 ff, ORBIT data base files, for other factors to be considered in estimating the appropriateness of your terms.

As you enter search terms, estimate your level of assurance that the term can be found in the index. If quite certain, simply enter it when ORBIT prompts:

```
SS 1/C?
USER:
FERMI RESONANCE
```

Use truncation if you are unsure of the ending characters of a term, and specify by the use of ALL that you will accept the various forms as search terms. The colon is used to indicate that any character or characters may follow the word stem entered.

```
USER:
ALL MICROWAVE:
```

To see what variant forms of your term exist before you make your choice of search term, use the NEIGHBOR command:

```
USER:
NBR SPACE STATIONS
```

This, as you know from your experience in earlier modules, gives a brief display, which may be extended upward or downward, of the index. The list gives the number of postings for each term, but you must type in the terms themselves for searching.

There is another capability in ORBIT which can be very useful. This is the multimeaning (MM) display which results when you enter a truncated term without the ALL preceding it. If you are looking for an author, e.g., Lowell D. Thomas, you have several possible forms of the name to check. Let us review and compare ORBIT options for search term entry using a proper noun for our example. The options are (1) use of the NBR command; (2) a truncated form of the name, with ALL specification; (3) simple truncation. See how the results compare/differ:

1. USER:
NBR Thomas, L/AU
PROG:
POSTINGS TERM
1 Thomas, L./AU
2 Thomas, L. A./AU
1 Thomas, L. D./AU
3 Thomas, L. E./AU
1 Thomas, L. M/AU
UP N or DOWN N?

2. USER:
ALL Thomas, L:/AU
PROG:
SS 17 PSTG (13)

3. USER:
Thomas, L:/AU
PROG:
MM (Thomas, L:) (13)
1 Thomas, L./AU
2 Thomas, L. A./AU
3 Thomas, L. D./AU
4 Thomas, L. E./AU
5 Thomas, L. M./AU
6 Thomas, L. Murray/AU
7 Thomas, Lacy C./AU
8 Thomas, Lauraine A./AU
9 Thomas, Leathia S./AU
10 Thomas, Leslie D./AU
11 Thomas, Lloyd B./AU
12 Thomas, Lorraine L./AU
13 Thomas, Lowell D./AU
SPECIFY NUMBERS, ALL, OR NONE

Note that in using the NBR command you must give additional commands, to move DOWN the index; and blindly, in that you don't know how far you will have to go to get all forms of the name. Also, you will then have to type in, very carefully, the three forms of the name which you discover.

In the use of ALL Thomas, L:/AU you get quickest results; your set is immediately created, with 12 postings, or items retrieved. You don't really have what you wanted, however, since Lacy, Lauraine, and others are included.

In the use of truncation without the ALL you generate a display of the variations of the name, in a numbered list. You may now select only the forms of the name wanted, and simply by typing in the numbers given. You don't know how many items you'll retrieve until you do so, but this is not useful data in such a well specified search.

Conclusion? The use of truncation, as in 3 above, is a very efficient way to browse the ORBIT indexes.

TRUNCATION AND CHARACTER SUBSTITUTION

When you are generating search terms to match index terms which were developed from words in document titles or abstracts you may need to plan for variant spellings or word forms. British authors, for example, spell differently from American authors.

ORBIT uses two different symbols:

- # (hash mark) always stands for one character or space, wherever it is used in a search term
- : (colon) replaces either no characters or any number of characters wherever it is used in a term

EXAMPLES:

LABO:R	This will retrieve LABOR, LABOUR, and any other index entries which begin with LABO and have R as the final character, e.g., LABORER, LABOYER
THEAT:	This will retrieve any term beginning with the five characters: THEAT
THEAT##	This will retrieve THEATER or THEATRE, but not THEATRES, etc.
G##SE	This will retrieve GOOSE, GEESE, GORSE, but no longer terms: e.g., Gothicise, gormandise

GENERATING MULTIFIELD SEARCH TERMS: ORBIT

The problem of creating a set of search terms which are useful in several fields of a file is compounded, in the ORBIT system, by the existence of two file building policies (See Module IV also). You should take into account whether you are dealing with one integrated index of all data fields (OLD ORBIT); or whether subject fields are lumped together in a basic index with separate indexes of other searchable fields.

In either case you must determine whether only single word search terms must be used, or whether in old ORBIT files you must enter multiword controlled vocabulary terms as the complete phrase. These requirements are to be determined for each file, as you use it.

In cases where you must reconstruct a multiword term, using single word search terms (for retrieval from titles, or as in NTIS where all multiword assigned terms are searchable only as single words), it is recommended that the logical AND be used:

```
USER:
SOLAR AND ENERGY
```

This causes false association, of course; a document on SOLAR flare research which gives ENERGY measures would be retrieved. ORBIT's text search capabilities may only be used on a set which you have already created. STRINGSEARCH and SENSEARCH can be very time consuming (expensive) so they should be used only for good reason. These capabilities are not implemented on the Emulator, but on the real system you could use them to narrow down this search with a command like:

```
STRS (AB) : SOLAR ENERGY :
```

which says that you want only documents having the words "solar" and "energy" adjacent in this order in the abstract.

MODULE VI USE OF LOGICAL OPERATORS

OBJECTIVES:

1. To be able to use the correct symbols for the logical operators: AND, OR, and (AND) NOT, in the system in use, DIALOG or ORBIT.

2. To be able to create logical statements which are acceptable to the system in use:

   e.g., in DIALOG a logical statement must begin with the COMBINE command and must use only previously created sets designated by set numbers;

   whereas ORBIT requires no command and permits you to use the words themselves (i.e., search terms) and/or set numbers of previously searched terms in one statement of a logical combination.

3. To know the order in which the system executes the logical operations, to appreciate the effect on the search results, and to be able to direct or control the order of execution of the commands to create the desired results.

In general, use OR to combine search terms which are synonyms:

AIR OR ATMOSPHERE

and use AND if both search terms are necessary to name the concept you are looking for:

AIR AND POLLUTION

and use NOT to indicate a search term which totally destroys the usefulness of a document:

SATELLITE AND NOT RUSSIAN/LANGUAGE

These logical operators may be combined in one logical statement, but be sure you are taking into account the order in which they will be executed. Use Module 6 for DIALOG or ORBIT explanation and practice.

We will go through a brief review of the operators and what they mean by using them to combine the terms ECLIPSE and SOLAR,
OR
if we combine the terms using OR (ECLIPSE OR SOLAR), we will retrieve items indexed by the term ECLIPSE, or the term SOLAR, or by both terms.

AND
if we combine the terms using AND (ECLIPSE AND SOLAR), we will retrieve only those items indexed by BOTH the term ECLIPSE and the term SOLAR. If an item is indexed by only one of the two, it will not be retrieved.

NOT
if we combine the terms using NOT (i.e., AND NOT) (ECLIPSE NOT SOLAR), we will retrieve only those items indexed by ECLIPSE that were NOT also indexed by SOLAR. (Possibly items on LUNAR ECLIPSES, etc., but note that you will lose items which are indexed by LUNAR AND ECLIPSE if they were also indexed under SOLAR.)

STRATEGIC USE OF LOGICAL STATEMENTS

The logical statement in which you specify the subject to be searched is a very powerful tool; if it is to do what you intend you must understand exactly how it operates on the system of your choice. These mechanics are the subject of your practice in Module 6.

There is no one good strategy for conducting a search online; the infinite number of possible aspect combinations for a particular use/question/search/system/file situation precludes rigid rules. Here are two general approaches which can give you an idea of the kinds of searches possible:

1. "Throwing a Wide Net" -- a generalized initial statement is entered to capture a broad group of documents which can be more and more finely sieved, before printing.

2. "Crystal Growing" -- a known article or author is used to generate a set of documents by finding terms in the nuclear document which can be used to create a larger, or somewhat different final set.

Actually, each search simply comes down to starting with the information available in the request itself, entering a strategy, assessing the value of the results, and changing the strategy accordingly until a group of documents has been defined which satisfy your needs.

MODULE VII HANDLINE OUTPUT OF SEARCH RESULTS

OBJECTIVES:

1. To be able to get search results printed online or offline, specifying which sets, which and how many items, and in what formats they should be printed.

2. To be able to specify appropriate formats for output when one simply wants to sample results to identify documents for hard copy acquisition or to get terms for broadening or narrowing a search.

Read pp. 41-43. Get online to TRAINER (see pp. 1-2), run Module VII, and Module A or B, using suggestions in TRAINER Exercises and Practice Searches, p. 68.

Once a search has been completed the searcher has two options for getting the results printed. One is to have the results typed at the terminal on which the search was performed, the other is to have the results printed offline at the search system's computer center and have the results mailed to the searcher. The decision is one of cost and benefit. If less than ten hits resulted from the search and there was a desire to provide the results faster than the normal three to five day offline printing delivery time, then it would seem reasonable to type the results online at the searcher's terminal. As the number of hits increases so does the time to type them at the terminal. This involves three types of costs: (1) online communications, (2) online computer time, and (3) the searcher's time. On the other hand, an additional cost per item will be charged for offline printing.

DIALOG

A searcher will typically want to sample the results of a search before deciding to print an entire set either online or offline. The command word may be TYPE, PRINT, DISPLAY, or an abbreviation or symbol to display the results of a search online. The DIALOG form of the command is:

TYPE (or PRINT for offline printout or DISPLAY for users of CRT's)

SET NUMBER/FORMAT NUMBER/DOCUMENT NUMBERS

an example would be

TYPE 1/2/5-10

This would specify that set 1 should be used for printing, according to format 2, documents 5 to 10 in the set. The specified set to be printed is, of course, chosen from among those created by a previous search. The document numbers will be in the range of the number of postings for the set to be printed. A single item may be requested: T 6/5/7.

The standard format options for DIALOG's bibliographic files* include

Format 1	DIALOG accession numbers
Format 2	Full record except abstract (default option - see below)
Format 3	Bibliographic citation
Format 4	Abstract and title
Format 5	Full record
Format 6	Title and DIALOG accession number
Format 7	Bibliographic citation and abstract
Format 8	Title and subject indexing

Formats 3 and 7 thus seem appropriate for producing bibliographies; Format 8 is especially useful for online revision of search terms used.

Be aware of differences among the files in the use of formats. Format 2 in one file may be entirely different from the format 2 of another.

Default options exist. If you do not specify items or format, the system will choose these automatically. Also, once you have issued the TYPE or PRINT command once, you may enter simply T or PR alone to get the next item(s) in these which you have previously identified.

ORBIT

ORBIT commands are simpler, in the preformatted versions; remember, however, that ORBIT is sensitive to spacing in your command statements.

The PRINT command (abbreviated PRT) is used to have retrieved items output, either at the terminal or on an offline printer. Users may specify the categories of bibliographic data to be printed, using abbreviated category names given in ORBIT descriptions of the files. The emulator supports all ORBIT formats.

There are 3 standard preformatted commands: PRINT, PRINT FULL, and PRINT TRIAL. If the user simply enters these commands with no further instructions, ORBIT will print items for the last set created: the first 5, 1, or 2 items of the set, respectively.

The PRINT command produces a display of the key bibliographic information (e.g., accession number, title, author, source). For example:

```
SS 7/C?
USER:
PRT 1
```

prints bibliographic data for one document (the first item in the last created set).

*Chronolog, v. 6, no. 11(Nov. 1978), p. 4

The PRINT TRIAL command provides a display of the categories that are subject related, e.g., the title and subject index terms.

```
SS 6/C?
User:
PRT TRIAL 5
```

might print accession number, title, corporate source and descriptors, for 5 items. NOTE: not item number 5, but 5 documents.

This format is often useful for identifying terms that might be used as part of your search strategy.

The PRINT FULL command provides a display of all printable categories of information:

```
SS 5/C?
USER:
PRINT FULL SS 2
```

will print the complete record for the first item of the previously created set numbered 2 (SS 2).

If you do not specify the number of items (default condition) ORBIT will print:

```
1 citation for PRT FULL
2 citations for PRT TRIAL
5 citations for PRT
```

All of the PRINT commands discussed so far will cause the specified items to be displayed online at the terminal. To have items printed offline, the term offline is added to any PRINT command. For example:

```
USER:
PRT FULL OFFLINE
```

will cause the items from the most recent SS number to be printed offline in the PRINT FULL format. The default for PRINTING OFFLINE is all of the items in the SS set, up to 1000 items.

Interpreting the Printout

The order in which records from a search are displayed is from entry date backwards, with the most recently entered records appearing first. To browse through search results, skipping from the most current records to earlier records, the searcher can use the "SKIP" command. The word SKIP followed by a number tells the program to display records occurring after the number of records to be skipped.

```
USER:
PRINT TRIAL SKIP 3
```

In this command, the 4th and 5th records would be displayed.

MODULES A AND B EMULATIONS OF DIALOG[R] AND ORBIT[R]

The documentation provided in the first seven modules explains the capabilities, commands, and conventions of the emulators (MODULES A and B) of the two "target" systems. Since the emulators have been programmed to behave just like the target systems, the documentation provided by those services could be used as well. To bridge the gap between the emulators and the operational services, as you complete the training program, we have enumerated system capabilities implemented and not implemented, under the categories established by Lawrence, Prewitt, and Bearman: housekeeping, searching, output, and support.

Direct access to the emulators, bypassing the index to the modules, may be accomplished by logging in in the usual manner (p. 1), but instead of entering R CTLYST when the prompt (.) appears, enter:

RUN DIALOG [134057,120121]

or

RUN ORBIT [134057,120121]

Practice searches and exercises, pp. 64-68, should be used to get started in the emulators and the Trainer data base.

EMULATORS ONLINE COMMANDS*

FUNCTIONS	DIALOG	ORBIT
(1) HOUSEKEEPING		
Starting search after login	BEGIN B ! (use with or without file number)	(Entry of any search statement or term or any command "expected" by ORBIT)
Terminating search Disconnecting from system	END = LOGOFF	STOP
Asking for list of accessible data base files	BEGIN (without file no.) ?FILES	FILES?
Elapsed time/cost	.COST (gives elapsed time and cost)	Elapsed time given at file change and end of search
Deleting search statements no longer needed	(BEGIN or BEGINn erases work done to that point)	(Not implemented) (FILE name, i.e., changing files erases previous work)
(2) SEARCHING		
Entering search terms	SELECT S # (with words, E numbers, range of E numbers)	(If entry is not a command word, it is assumed to be a search term) FIND FD
Displaying alphabetical list of terms	EXPAND E " (no thesaurus access) PAGE P	NBR (with UP and DOWN option, incl. default to DOWN)
Creating search logic	COMBINE C $ (use set numbers with AND, OR, NOT (*,+,-) operators) shortcut C1-3/+	(Usually in search mode; use AND, OR, AND NOT operators with terms or set numbers)
Changing data base files	BEGIN_____ (insert file no.) .FILE_____ (insert file no.)	FILE_____(insert file name)
Root searching	TERM? (any number of characters to right of term)	TERM: (any number of characters to right of term) with, without ALL
	THEAT?? ? (maximum number of characters to right of term)	THEAT## (specific number of characters to right of term)
Character substitution	WOM?N (one character embedded in term)	WOM#N (one character embedded in term)
	TETRA???ORIDE (specify number of characters embedded in term)	TETRA###ORIDE (specify number of characters embedded in term)
	(Not available on LRS DIALOG)	LABO:R (any number of characters embedded in term)
Restricting searches	By author (AU=) and title(/TI) fields	By author (/AU) and title (/TI) and index word (IW) and index term (IT) fields

*after Lawrence, Prewitt, Bearman, "User's Quick Guide," NFAIS, Philadelphia, March 1977 (see List of Useful Training Documents, Appendix 2)

FUNCTIONS	DIALOG	ORBIT
(3) OUTPUT		
Online printing	TYPE T ' (for printing terminals)	PRINT PRT
Formatting printout	Up to 10 defined formats for each file--see file descriptions	3 defined formats: default, FULL, TRIAL, or user defines by specifying field(s) to be printed
Specifying items to be printed	Specify set number, (format), sequence number of item or range of item numbers. Same default options as LRS' DIALOG	Specify set number, number (i.e., quantity) of items. Same default option as SDC's ORBIT SKIP
Offline printing	PRINT PR & (used as TYPE, above) PRINT-(print cancel)	PRINT OFFLINE (used as PRINT, above)
Interrupting online output	Available, but different from DIALOG: use(control key)-O	Available, but different from ORBIT: use (control key)-O
(4) SUPPORT FEATURES		
Erasing whole lines (errors) before transmitting	Available, but different Use (control key)-U	$ and Carriage Return
Erasing single character errors of input	(Delete key)	(Delete key)
Explanation	EXPLAIN (refers trainee to CALP modules)	EXPLAIN (refers trainee to CALP modules)
Providing description of search	DISPLAY SETS DS @	HISTORY (displays list of search statements, with all ORBIT options, e.g., range: HISTORY 6-10)
Assistance on procedures	Computer Assisted Learning Modules, and local phone, WATS line	Computer Assisted Learning Modules, and local phone, WATS line

Commands not implemented on TRAINER emulators include:

1. Housekeeping

For DIALOG, none; for ORBIT: TIME, TIME INTERVAL, TIME RESET

2. Searching:

For DIALOG:

Viewing thesauri: EXPAND(WORD)
Text searching: (W), (nW), (F), (C), (L), (S)
Stacking commands
Saving search strategies: END/SAVE, .RECALL, .EXECUTE, END/SDI, .RELEASE
Restricting searches: LIMIT, LIMITALL, range searching, field qualifiers except AU=, /TI
Range searching: :(colon)

For ORBIT:

Deleting search statements: ERASEALL, BACKUP, RESTART
Text searching: STRINGSEARCH, SENSEARCH
Stacking commands
Saving search strategies: KEEP, SAVE, SAVE CANCEL, DELETE, SAVEOLD
Creating search logic: SUBHEADINGS, SUBS
Restricting searches: all except /AU, /IW, /TI, /IT

3. Output

For DIALOG:

Online display: DISPLAY D
Sorting: .SORT

For ORBIT:

Sorting: SORT

4. Support Features

For DIALOG: ?NEWS (TRAINER News goes out in opening CALP Modules), DISPLAY SETSn

For ORBIT: NEWS, HELP, COMMENT, ORDER, RENAME SECURITY, VERSION, TERMINAL

Appendix I Login Trouble Shooting

A detailed list of possible steps in a computer session

(1) ↑C — Holding down the key labeled "CONTROL", strike the character "C". Use it to get the attention of the computer when you use a "dial-up" terminal, or to restart a login which doesn't go well!

(2) . — The period at the beginning of a line indicates the computer's operating system is awaiting your command. During the session at the terminal, if the . appears at the beginning of a line, it means that you have somehow gotten outside the CATALYST (CTLYST) program. To restart it, without having to login again, type (after the .) RUN SYS:CTLYST or R CTLYST. DON'T FORGET TO STRIKE THE CARRIAGE RETURN AT THE END OF EACH INPUT LINE.

(3) .I — The capital letter I is an INQUIRY; you must work on system A, not system B (see line 4).

(4) PITT DEC-1077/B 61B.86 14:26:48 TTY123 system 517/554 — The /B means you are on the wrong system so you type TTY SYS A.

(5) .TTY SYS AA — If you make an error, as shown here, the system will question it(6), and wait for a new input (7).

(6) ?TTY SYS AA?

(7) .TTY SYS A — Retype the command. Always enter spelling, punctuation and spacing exactly as shown.

(8) PITT DEC-1077/A 61B.87 14:27:05 TTY123 system 596/604 — Now you are on system A and must login.
Please LOGIN or ATTACH

(9) .LOGIN 134057,120121 — This must be typed with precision; skip spaces only where shown.

Use your own number, instead of 134057,120121.

(10) JOB 45 PITT DEC-1077/A 61B.87 TTY123 — When you login successfully, you have a job number.

(11) PASSWORD: — Now type the password assigned to you (p. 1). Notice that the password does not print out on the terminal (security feature).

(12) LGNIET INVALID ENTRY - Try again — If the password you enter doesn't match your PPN, you are given another chance
P,PN: 134057,120121 — Just the numbers this time

(13) PASSWORD:

(14) .R CTLYST

The operating system gives you a period again and you ask it to run CATALYST.

(15) CATALYST/II
25 APRIL 1980 14 27 49.7

Now CATALYST (CTLYST) is online, and (16) will ask you to supply a lesson name and section and to supply the login number of the "owner" of the lesson (here the lesson is TRAINER, and the owner is 134057,120121). Be careful to use letters o and l and numbers zero (0) and one (1) correctly.

(16) Lesson.Section[P,Pn]:TRAINER[134057,120121]

(17) STI SERVICES CAL PACKAGE-MODULE 1

The program now runs until you are ready to end the session, by typing EXIT at any point where a response from you is expected.

(18) EXIT (or LOGOFF (DIALOG)
or STOP (ORBIT))

(19) .K/F

When you get a period, kill the job by typing K/F. Be sure to wait for all the accounting information to be typed out and the bell to ring. Hang up the telephone, and turn off the coupler and terminal if you are using a "dial-up" terminal.

You will use one of the three commands (step 16), depending upon which part of the training program you are using, to conclude your session. The first seven modules require one or more EXIT commands; the DIALOG module requires LOGOFF; ORBIT expects STOP.

You will know you have successfully closed a session when the period (.) prompt appears at the beginning of a line. The operating system of the computer is still active. You may restart the training program (see step 2) or break off your connection to the computer by typing K/F.

Appendix 2 Brief List of Useful Training Aids

DIALOG and ORBIT

Lawrence, Barbara; Prewitt, Barbara; Bearman, Toni C. "On-line Commands; A User's Quick Guide for Bibliographic Retrieval Systems," 1977, available from National Federation of Abstracting and Indexing Services, 3401 Market St., Philadelphia, PA 19104 $2.00 prepaid

Stockey, Edward A. and Basens, Sandra J. An Introduction to Data Base Searching; A Self-Instruction Manual. Philadelphia, PA, 1977

DIALOG

Bourne, Charles P. DIALOG[R] Lab Workbook; Training Exercises for the Lockheed DIALOG[R] Information Retrieval Service, 1976. Institute of Library Research, University of California, Berkeley, CA 90406

Lockheed Information Systems. A Brief Guide to DIALOG[R] Searching, 1976, Palo Alto, CA

_____. Pocket Guide to DIALOG Commands, 1978. 1 sheet, folded

_____. Guide to DIALOG[R] Data Bases, v. 1-2, 1977

Markey, Karen and Atherton, Pauline. ONTAP; Online Training and Practice Manual for ERIC Data Base Searchers. ERIC Clearinghouse on Information Resources, Syracuse University, June 1978.

ORBIT

System Development Corp. ORBIT[R] Quick Reference Guide, 1977, 2500 Colorado Avenue, Santa Monica, CA

_____. ORBIT[R] User Manual, March 1976

Both services provide newsletters and updates for their documentation to service subscribers.

The various data base file suppliers also provide vocabulary aids, descriptions and notes about the separate files; these become available to you on request or purchase where you use the services.

Appendix 3 The Data Base TRAINER

The data base available to the emulators consists of single issues, or issue-length segments, of over sixty different file titles. A number of files are kept online at any one time; they are selected to reflect the interests of current trainee groups. TRAINER managers can change these any time by running a brief "File Maintenance" program (see Final Technical Report, December 1977). Use ?FILES (DIALOG) or FILES? (ORBIT) to see "what's up."

```
?FILES
      1  -NTIS
     2  -OCEANIC ABSTRACTS
     3  -ENGINEERING INDEX
     4  -CAS CONDENSATES
     5  -SOCIOLOGICAL ABS
     6  -ABI/INFORM
     7  -BIOSIS
     8  -PSYCH ABSTRACTS
     9  -ERIC
```

Appendix 4 Three levels of user competence

(Extract from article "Hands On Online" ON-LINE REVIEW, 1978)

2.5 Levels of user proficiency

Our consideration of the problem of adding the end-user to the population of users on online systems led us to the articulation of acceptable levels of proficiency, i.e. competence less than the total mastery expected of the professional searcher but nevertheless constituting a realistically useful skill for the end-user.

In analyzing this difference between end-user training and information professional training, we have established two possible degrees or levels of end-user proficiency that are desirable for the end-user, and which we believe to be achievable within the limited amount of time and effort which the end-user can be expected to expend on learning to use this research tool:

(i) An end-user can achieve satisfaction in searching online databases when he can use one or two of the more comprehensive existing document retrieval systems, with ease and confidence, to retrieve useful references from the particular database files which he recognizes as source files for his area of interest (see Fig. 1).

(ii) An end-user can be independently competent to use online retrieval systems for all his information needs when he can use one or several of those systems with a high degree of skill and efficiency, to retrieve essentially total recall of relevant references, when that is his intent or need, from those

The first level is described in its three aspects:

1. The trainee knows and can use the 'most-used' capabilities of the service(s) of his choice.

   ON DIALOG
   BEGIN – – (number)
   .FILE – – (number)
   ?FILES
   EXPAND – – (term)
   SELECT – – (term(s))
   COMBINE (NOT,AND,OR)
   TYPE)
   PRINT) with formats
   END
   DISPLAY SETS
   root search (TERM?)
   LOGOFF

   ON ORBIT
   "FILE – – (name)
   SS I/C? AND,NOT,OR
   "FIND
   "NBR
   "PRINT (ONLINE and OFFLINE with formats)
   "STOP
   root search (TERM:)
   "HISTORY
   "FILES?

Fig. 1 *First level of competence*

2. The trainee can use the vocabulary negotiation capabilities of the service(s) to retrieve document references of value to him; he can decrease or increase the size of the retrieved document set in a meaningful way by using the logical operators AND, OR, NOT.

3. The trainee knows the database(s) most useful to him:

   He can use documentation as provided by the service(s) to determine: (*a*) which data elements of the records can be directly searched, and (*b*) whether controlled or uncontrolled indexing is used in the fields he searches. He knows and can use any necessary tools for choosing search terms before getting online. He can bring it online for searching.

database files of greatest utility to himself in his field of inquiry.

The first level of competence is essential to the second; only user perception of the online skill as an instrument of great value, and of potentially even greater value, can serve as motivation for that end-user to develop fuller competence in the online search environment. It seems unlikely that end-users who use online searching solely for their personal information needs will spend enough time online to develop and maintain skills, or to keep up with changes in the search system and its database; this second level of proficiency is more appropriately the goal of the subject specialist who acts as a search intermediary for colleagues in the same field.

Not surprisingly these two levels seem to coincide, in some respects, with observed stages in the development of online search specialists. Librarians tend to cluster into 'beginners' and 'advanced' training groups, in the experience of the developers of seminars and workshops. A period of latency, and practice to an estimated eight hours or more online, seems to exist between the two stages. Practice is expensive on the operational systems, and unless the user/trainee is an employee of the service to be learned, he will get his practice doing actual searches for the group, individual, or institution which can pay for the search. This practice or learning time thus adds a hidden, unaccountable cost to the expected cost per minute, i.e. an actual dollar cost which results from a less efficient search. There are also the undiscoverable costs of possible inadequate results of the search.

A third defined level of competence is identified with the professional information retrieval specialist; it includes a wide range of systems experience, and comparative study and comprehension of the strong and weak points in those systems, and control of the whole database scene as well. Knowledge of tools for identifying and acquiring data files and of the effective use of those files, equivalent to the level of expertise developed by the specialist in traditional library reference services would be a basic requirement.

2.6 Provision for alternative learning styles

We have taken a serious look at the work of Gordon Pask and his associates. While we have not used his method of structuring content, we have attempted to provide an experience which is appropriate to the three styles he has identified as being comprehensive of the universe of learner styles and which at a given period time, with a particular learning task, are mutually exclusive styles [9]. These are, as identified by Pask,

1. Holist, redundant
2. Holist, irredundant
3. Serialist

Pask's research clearly indicates that learning is considerably enhanced or retarded, according to whether the material presented to the learner is in accord with his currently preferred learning style. The following section of this paper wherein we describe the organization of the elements of the learning experience will show how we have provided for these styles. What we have not done *à la* Pask is to make any prelearning attempt to sort out individuals according to learning style, or assign them to any particular organization of the content. What we have done is make the structure of the available learning experience as obvious to the user-trainee as we are able. It will be interesting to observe from our automatically recorded individual user tracings whether any user consistent patterns of approach appear. Two apparently self-consistent styles are postulated in the 'scanarios of use'.

2.7 Scenario—use of the training modules for online bibliographic retrieval systems and databases

Sue sits down at the terminal, which is already online and waiting for her to begin. She reads the message printed there, which is essentially a table of contents, or menu of

Appendix 5 (pp. 61-69) Exercises and Suggested Searches for Practice

MODULE I Supplementary Exercises

Objectives: CALP1 taught you to follow very rigidly and precisely a particular sequence of steps. Inevitably you will make errors. Learn how to deal with them and begin to discover where and how you can vary your approach to the computer to suit yourself. (See also Login Trouble Shooting, p. 51)

↑U 1. Type a misspelling of login. Note computer response. Type a misspelling of login, but before you hit the carriage return, hold down the CONTROL key (on your left) and strike the "U" key. This erases the line before it is sent to the computer, and thus you get no error message. Remember this use of CONTROL-U.

2. Variations and shortcuts in use of system commands are often available to initiates of the computer. Try this variation of the commands you learned in Module I.

```
.LOG 134056,120121  (Use your own PPN)
PASSWORD=>
.R CTLYST
```

How does it differ from the protocol you were taught?

↑C 3. Deliberately enter an erroneous password. Now try to recover from the error to complete your login. If you become frustrated, you can hold the CONTROL key down while striking C to start over from the beginning; the value of this effort lies in your persisting until you succeed.

4. When CATALYST asks for the lesson and section number, use (i.e., MISUSE) letter o for the zero. Is the message the computer gives you helpful in understanding your "error"?

When the computer (either the operating system or a special program such as the CALP modules) is waiting for you to enter a command or respond to a question, it has a list of likely responses which is compared with whatever you enter. If the response or command you enter does not match any of the pre-stored expected entries, you will be told so using previously stored messages. If the program is <u>very</u> sophisticated the message can be very specific about why your entry failed to produce the results you expected it to; otherwise you get a very generalized error message. In some cases the computer program cannot detect your error at all. This can result in erroneous or misleading answers in which you may have no way of recognizing incorrect or incomplete responses. We will point out such cases in later modules. A very simple example:

> Failure to spell a search term correctly will simply cause the search programs to report 0 results; or if you use one of several spelling variations (film,films) you might retrieve about half of the appropriate documents (where film=93 items, films=87 items).

10

5. Time is money--so don't let the system waste yours! If the computer is printing something you don't need or want to see, INTERRUPT it, by holding down the CONTROL key, and striking the O key. Try it, to stop listing of the index. Each system has an interrupt capability. (See the Trainer Reference Card.)

6. Speaking of money, notice the accounting information given to you each time you logoff the system (see Figure 2). What information is given? Efficient searching will minimize "connect time," of course, by reducing time spent in entering searches, for online typeouts, for thinking out strategy which could have been planned ahead of time.

7. If your terminal is not printing 2-3 characters at the beginning of each line use the LOG procedure shown in Item 2 of this exercise. Before you enter R CTLYST use this command:

.TTY FILL 2

This will slow down the data transmission so the carriage can position itself in time to print those characters.

8. Your PASSWORD should be known only to you. If it becomes compromised you should change it. Procedures for changing SDC and Lockheed passwords or for adding security codes are not covered in our Trainer; however, you do need to know how to protect yourself in Trainer, so change your PASSWORD (to a memorable personal code). Use this variation of LOGIN:

LOG 134057/(YOUR NUMBER)/PASSWORD

You will be asked for your PASSWORD (the old one, as usual), and then asked for your new PASSWORD:

A transcript of a PASSWORD change:

```
.LOG 134057/040736/PASSWORD
JOB 22 PITT DEC-1099/A 603.79 TTY17  FRI 9-FEB-79 1353
SWORD:
NEW PASSWORD:

RETYPE FOR VERIFICATION

NEW PASSWORD:
AST PASSWORD UPDATE: 6-SEP-78 1014
ST LOGIN: 5-FEB-79 1253
ITS REMAINING: 72.1   UNITS USED: 0.2
```

Notice that the PASSWORD never prints! If there is a discrepancy between your two entries of the new PASSWORD, you will be asked to repeat the process.

MODULE II Supplementary Exercises

Objective: to be able to estimate charges to be incurred when you access a remote bibliographic search service

When you use any communication and/or computer system you are apt to be vitally interested in costs incurred. Elements which constitute "out of pocket" costs to you include: communication costs; "connect time" charges; cost per item printed.

1. Data transmission (direct dial to the computer or to the network "port") — HOW LONG IN THE NETWORK? (varies with distance, over 50 mi., est. $25/hr.)

   Network (TYMNET or TELENET) — $5-8/hr

2. +Connect time - Based primarily on use of files. Rate varies for each file. — HOW LONG IN THE FILE?

   Examples:

	DIALOG	ORBIT
ERIC	$25/hr	$35/hr
BIOSIS PREVIEWS	65/hr	65/hr
NTIS	35/hr	45/hr
COMPENDEX	65/hr	65/hr

3. +Charges per item printed <u>off-line</u>. Varies for each file, and for different formats. — HOW MUCH FOR EACH OFFLINE PRINT?

   Examples:

ERIC, format 5	$0.10/item	PRT	$0.08
ERIC, format 2	0.05/item		
NTIS, format 5	0.10/item	PRT	0.08
NTIS, format 2	0.05/item		
Fdn. Grants, format 5 or 2	0.30/item	PRT	0.35

Think of these three contributing cost factors as you go on to Module III, to begin to look at the search process. When you have finished your practice on the Trainer emulations, and before you get online to SDC or Lockheed, notice the amount of time you spent online. How much time was "lost" by hesitancy, mistaken entries, looking up commands or rules for using commands? Convert the time lost to dollars using the cost figures above. Calculate the "out of pocket" costs of your slowness. Do you want to/need to practice more before you go online to the real system?

Sorry to keep harping on costs, but it's an important factor in determining whether you or anyone will use the retrieval services.

MODULE III Practice Searches

Using either the DIALOG or ORBIT emulators (Modules A,B), practice using all the commands learned in Module III. Use NTIS and ERIC files to run searches on topics which follow, or make up your own searches.

1. Hazards of using microwave equipment

2. In the area of Raman spectroscopy, a resonance effect named for Enrico Fermi

3. A modular program for teaching skills important in group work

4. Instruction in handwriting

5. Find a report on a research project: the title of the report is:

   The Development of a Technical Conceptual Structure for the Concepts Possessed by Selected Quality Control Specialists. Report of a Research Project.

6. Find an article about computerized terminology

MODULE IV Practice Searches

You choose the file or files, and fields for searching

1. A title, vaguely recalled: Establishing a behavioral baseline for studying the effects of nonionizing radiation on rats. Find <u>the</u> article.

2. Article on conductivity proporties of silicon.

3. Find a title which includes the words motivation theory.

4. Find an article by: MACK, FAITE R...

5. Find information on the transition temperatures of transition metals.

6. Find an article which uses the search term SELF-DISCLOSURE in the title.

MODULE V Practice Searches

1. A survey of current literature on the use of rats in laboratories, for a biological supply house

2. Try looking for Sam whose last name sounds like Wiceman (rhymes with iceman). There are 4 possible ways to spell it. Compare use of truncated name forms and use of index display as shortcut in entering various name forms.

3. Look for Lowell D. Thomas.

4. International relations is a valid subject heading in the NTIS file; however, some articles are not indexed by this heading although the title clearly indicates that international relations are the subject. Find all.

5. Find article(s) by D. M. Ricks.

6. Find articles by Greg Fouts.

7. Use truncation or character substitution to find articles on TIME or TIMES, but not on subjects like TIME SHARING where TIME is not the actual subject of the articles.

8. Use truncation to retrieve all index entries where TIME is the first word. Do you have any new "hits"? Did you retrieve all the hits from Q. 7? In DIALOG use format 1 to get just the accession numbers printed:

   TYPE n/1 e.g., TYPE 7/1

   In ORBIT get just the authors:

   PRT SS n AU e.g., PRT SS 2 AU

MODULE VI Practice Searches

1. Get all possible documents on lymph, lymphocytes, lymphatic system. Get documents on radiation of any type: the object is to find all available reported data on effects of radiation on the lymphatic system.

2. An exhaustive search for documents about lens damage (cataracts for example) in conjunction with use of microwaves.

3. Find articles on the subject of this article:

   An Evaluation of Training in Three Acts, by
   Elsbree, Asia Rial; Howe, Christine
   Descriptors: Management Education, Program Evaluation, Planning, Data Collection, Information Needs, Evaluation Methods, Training Objectives, Educational Programs

4. Find something dealing specifically with assistive devices used to rehabilitate the handicapped: a very narrow, specific search.

5. Get just a few current articles on handicapped; a current awareness type search.

6. Find everything on handicapped; an exhaustive search. Look for additional useful search terms.

7. Find something on human interaction which deals specifically with the family.

8. Find anything on human interaction, except if it deals with the family.

MODULE VII Supplementary Exercises

Using CALP Modules A and/or B, practice with results from any online search session until you can quickly command online typeout or offline printing. Tricky points for mastery:

DIALOG:

the order of the elements in the format statement (a friend Mary D. told me she recalls them by using the mnemonic San Francisco Interchange for Set, Format, Item!)

use of "default" option to view successive items

ORBIT:

use of the SKIP command to see additional items without retyping items already viewed

use of separators when specifying different options for printing, particularly the use of the comma to separate elements (author, title) when tailoring your own format.

1. (DIALOG) Using results of any search you care to make, practice creating variations of the TYPE format: changing the three arguments SET/FORMAT/ITEMS. Note what happens when you fail to specify one or more of the arguments. This is called the "default" option. Default options produce results which are most commonly useful. Try a TYPE command specifying only the set number. What is the format and item default?

   Try formats 1 and 2 without specifying items. How many items are given you?
   Try repeating this step. What items do you get?

or (ORBIT) Using any search result, try PRINT FULL and PRINT TRIAL option. What differences do you observe?

   Try the default option, by just using PRINT (or PRT) without specifying either FULL or TRIAL. What are the differences in fields displayed? In number of items?
   When no particular SS (Search Statement) is specified the last set created is printed. Practice printing other sets:
   PRT SS 1.
   Try specifying which fields are to be printed:

```
PRT  TI, AU  SS 2
```

2. (DIALOG or ORBIT) Run a search, and have the results printed out in each format, specifying the same document to be printed each time. Repeat the exercise, using another file. Note differences between formats, and if there are differences in the same format when another file is used.

3. (DIALOG) TYPE commands give you online output. The PRINT or PR command is used to request offline printout of search results. It is used with the same format arguments as the TYPE command. Try it, as you used TYPE, to get a "feel" for it online. No offline prints will actually be generated in the emulator/DIALOG system.

or (ORBIT) ORBIT uses the same command for online or offline printout; simply add the specification OFFLINE to any form of the PRINT statement. No offline prints will be generated in the emulated ORBIT system.

ACCESS TO TRAINER 1
ACCESS TO TRAINER; DIALOG,ORBIT 45
ACOUSTIC COUPLER 3
ALL ORBIT 31,35,36
AND 39,40
DIALOG 11,39-40
ORBIT 16,39-40
AND NOT ORBIT 16
BASIC INDEX 25,27,30
BEGIN DIALOG 10
BEGIN N DIALOG 12,29
BROWSING 31
C (COMBINE) DIALOG 11,39-40
CARRIAGE RETURN(CR) 1
CATALYST (CTLYST) 1
CATEGORIES OF BIBLIOGRAPHIC DATA 25,26
CHANGING FILES 28
CHARACTER SUBSTITUTION
DIALOG 33
ORBIT 37
COLON ORBIT 35-37
COMBINE(C) DIALOG 11,39
COMBINING SEARCH TERMS 39-40
COMPLEX SEARCH STRATEGY 21,39-40
CONNECT TIME 19,29,63
CONTROL C (↑C) 1,61
CONTROL KEY 1,61
CONTROL O (↑O) 47,62
CONTROL U (↑U) 47,61
CONTROLLED VOCABULARY INDEXING
DIALOG 32,34
ORBIT 35
.COST DIALOG 19
COST OF SEARCHING 19,29,63
CR (CARRIAGE RETURN) 1
CRT 41
CTLYST (CATALYST) 1
DATABASE 18-30
DEFINED 19
DATA COMMUNICATIONS NETWORKS 3
DATA ELEMENTS 24,25
DEFAULT CONDITION
IN SEARCHING FIELDS 27
IN PRINT COMMANDS
DIALOG 42
ORBIT 43
DESCRIPTORS 24,27
DIALOG COMMANDS 9-13,46-49
DIRECT ACCESS TO EMULATORS 45
DIRECT DIAL 3
DIRECT SEARCHING(DEFINED) 24
DIRECTLY SEARCHABLE FIELDS 19,22-24
DIALOG 23
ORBIT 22
DISPLAY DIALOG 12,40
DISPLAY SETS(DS) DIALOG 12,28
DOWN N ORBIT 31
DS (DISPLAY SETS) DIALOG 12,28,47
E(EXPAND) DIALOG 10-11,31

EMULATORS 45
COMMANDS NOT IMPLEMENTED(TABLE) 48-49
ONLINE COMMANDS(TABLE) 46-47
DIALOG 9-13
ORBIT 14-17
END DIALOG 12,29
EXIT 1,2
EXPAND(E) DIALOG 11-12,31,32
EXPLAIN DIALOG 9-10,47
EXPLAIN FILES (?FILES) DIALOG 9-10,46
FD(FIND) ORBIT 15
FIELDS 24,25,27-28,32
FIELD SEARCHING 25,27-28
FILES 19-26
DEFINED 19-21
FILE ORBIT 15,28
,FILE N DIALOG 12,28,46
FILES? ORBIT 14,28
?FILES (EXPLAIN FILES) DIALOG 9-10,46
FIND(FD) ORBIT 15,46
FORMAT
DIALOG 41,42,47
ORBIT 42,43,47
HASH MARK ORBIT 37
FULL-TEXT SEARCH OPERATORS DIALOG 34
FULL-TEXT SEARCHING 24,38
HISTORY(HIS,HIST) ORBIT 16,28,47
INDEX TERMS 27,30-35
INDEXES
AUTHOR 25,27
BASIC 22,23,25-27
SUBJECT 25,27
INDEXING 25-28
INDIRECT SEARCHING 24
INTERRUPT 47,62
K/F 1,2,12
LOGICAL COMBINING OF SEARCH TERMS
DIALOG 11-12,39-40
ORBIT 16,39-40
LOGICAL OPERATORS 16,39-40
LOGIN PROCEDURES,PITT 1,2
LOGOFF
DIALOG 12,29,46
PITT 12
FOR ORBIT, SEE STOP
MM (MULTIMEANING DISPLAY) 31,35-36
MULTIFIELD SEARCH TERMS
DIALOG 34
ORBIT 38
MULTIMEANING (MM) DISPLAY ORBIT 31,35-36
MULTIPLE FILE SEARCHING 28
MULTIWORD SEARCH TERMS 27,32
DIALOG 32
ORBIT 35,38
NEIGHBOR (NBR) ORBIT 15,31,35-36
NOT DIALOG 39-40
SEE ALSO AND NOT ORBIT
OFFLINE PRINTING
DIALOG 12,41
ORBIT 43

77

ONLINE PRINTING
DIALOG 41
ORBIT 43
OR 39-40,46
ORBIT COMMANDS 14-17,46-49
OUTPUT COMMANDS
DIALOG 12,13,41-42,47
ORBIT 16,17,42-43,47
P (PAGE) DIALOG 31,32,46
PR (PRINT) DIALOG 12,13,41-42,47
PRT(PRINT) ORBIT 16,17,42-43,47
PADDING (FILL COMMAND) 62
PAGE (P) DIALOG 31,32,46
PASSWORD
PITT 1,2
CHANGE PROCEDURES 62
SEARCH SYSTEM 5,6,7
PITT COMPUTER SYSTEM TELEPHONE NUMBER (ACCESS) 1
POSTINGS MESSAGE
DIALOG 33
ORBIT 35
PREFIX FIELD DIALOG 25,27,32
PRINT
DIALOG (PR) 12,41-42,47
CANCELLATION 47
ORBIT (PRT) 12,41-42,47
PRINT FULL ORBIT 16,42,43,47
PRINT FULL OFFLINE ORBIT 43
PRINT TRIAL ORBIT 16,42,43,47
PRINTING OFFLINE
COSTS 29,63
DIALOG 41-42
ORBIT 42-43
PROMPT
PITT 1
DIALOG 9
ORBIT 14
QUALIFIERS 27
QUESTION MARK DIALOG 33
REFERENCE NUMBER 11
RELATED TERMS 11
ROOT SEARCHING
ORBIT 35-37
DIALOG 33
S(SELECT) DIALOG 11,34,46
SAMPLE SEARCH
DIALOG 13
ORBIT 17
SAMPLING SEARCH RESULTS
DIALOG 41,42
ORBIT 42,43
SEARCH SERVICES 21
SEARCH SYSTEM 3
SEARCH TERM ENTRY
DIALOG 11,34
ORBIT 15,17,35
SEARCHING
DIRECT(DEFINED)
DIALOG 24
23

ORBIT 22
INDIRECT 24
MULTIPLE FILE 28
SUBJECT 31
SELECT(S) DIALOG 11,32,39,46
SINGLE WORD INDEXED FIELD 27
SINGLE WORD SEARCH TERMS 22,23,27,38
SKIP ORBIT 16,43,47
SPACING 1,28
DIALOG 13
ORBIT 14,42
STACKING OF COMMANDS
DIALOG 48
ORBIT 15,48
STOP ORBIT 16,46
SUBJECT INDEX 25,27
SUBJECT SEARCHING 30
SUFFIX FIELD 25-28
T (TYPE) DIALOG 12,13,41,47
TELECOMMUNICATION NETWORKS 3
TELENET 3,7,29
TELENET TERMINAL IDENTIFIERS 7
TELEPHONE NUMBERS
PITT COMPUTER SYSTEM 1
TERM QUALIFIERS 27
TERMINAL IDENTIFIERS 6,7
TIME ORBIT 29
TIME COMMANDS ORBIT 29
TIME INTERVAL (TIME I) ORBIT 19,29
TIME RESET (TIME R) ORBIT 19,29
TIMING DATA 29
TRUNCATION 31
DIALOG 32,33
ORBIT 35-36
TTY FI 2 62
TYMNET 3,6
TYMNET TERMINAL IDENTIFIERS 6
TYPE (T) DIALOG 12,13,41,47
UNIT RECORD STANDARDIZATION ORBIT 26
UP N ORBIT 31
USERID 6
(W) DIALOG 34

79

U S DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

TRAINER

A Textual Representation

Section A: DIALOG

BEST COPY AVAILABLE

Contents:

Foreward i-iv

Detailed listing of contents of transcripts v-viii

This material is based upon work supported by the National Science Foundation, Grants DSI 76-09538 and 77-26525

Any opinions, findings, and conclusions or recommendations expressed in this publication are those of the author(s) and do not necessarily reflect the views of the National Science Foundation.

Copyright © 1979 Elaine Caruso

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Elaine Caruso

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

IR007892

TRAINER: A Textual Representation

TRAINER is very difficult to present in printed form. It is an activity, not a text. Its textual content can only be represented by examples; the organization of the content varies with every use, depending upon Trainee choices and responses.

The Computer Assisted Learning Modules

The contents of the tutorial modules, as they appear on the Trainee's terminal, vary, of course, depending on Trainee responses. In this text an attempt is made to present all contents in two modes:

first, as if the Trainee were completely unprepared, not having read the TRAINER Manual, nor even having the Mini-Manual at hand;

second, as if the Trainee were simply reviewing to fix his learning, or to refresh it, after an interval of disuse.

DIALOG and ORBIT Emulator Modules

The emulator modules are even more difficult of representation than the tutorial modules. The best approach here is to consider the emulators to be languages; the vocabularies of the languages are given on the following three pages. Examples of Trainee use of the emulators are interspersed with the tutorial modules to show their expected use as the Trainee develops increasing skills.

This text is divided into two sections:

Section A: DIALOG segments of Computer Assisted Learning and Practice (CALP) Modules and use of Module A, DIALOG emulator;

Section B: ORBIT segments of CALP Modules and use of Module B, ORBIT emulator.

This is Section A: DIALOG

EMULATORS ONLINE COMMANDS*

FUNCTIONS	DIALOG	ORBIT
(1) HOUSEKEEPING		
Starting search after login	BEGIN B ! (use with or without file number)	(Entry of any search statement or term or any command "expected" by ORBIT)
Terminating search Disconnecting from system	END = LOGOFF	STOP
Asking for list of accessible data base files	BEGIN (without file no.) ?FILES	FILES?
Elapsed time/cost	.COST (gives elapsed time and cost)	Elapsed time given at file change and end of search
Deleting search statements no longer needed	(BEGIN or BEGINn erases work done to that point)	(Not implemented) (FILE name, i.e., changing files erases previous work)
(2) SEARCHING		
Entering search terms	SELECT S # (with words, E numbers, range of E numbers)	(If entry is not a command word, it is assumed to be a search term) FIND FD
Displaying alphabetical list of terms	EXPAND E " (no thesaurus access) PAGE P	NBR (with UP and DOWN option, incl. default to DOWN)
Creating search logic	COMBINE C $ (use set numbers with AND, OR, NOT (*,+,-) operators) shortcut C1-3/+	(Usually in search mode; use AND, OR, AND NOT operators with terms or set numbers)
Changing date base files	BEGIN_____ (insert file no.) .FILE_____ (insert file no.)	FILE_____(insert file name)
Root searching	TERM? (any number of characters to right of term)	TERM: (any number of characters to right of term) with, without ALL
	THEAT?? ? (maximum number of characters to right of term)	THEAT## (specific number of characters to right of term)
Character substitution	WOM?N (one character embedded in term)	WOM#N (one character embedded in term)
	TETRA???ORIDE (specify number of characters embedded in term)	TETRA###ORIDE (specify number of characters embedded in term)
	(Not available on LRS DIALOG)	LABO:R (any number of characters embedded in term)
Restricting searches	By author (AU=) and title(/TI) fields	By author (/AU) and title (/TI) and index word (IW) and index term (IT) fields

*after Lawrence, Prewitt, Bearman, "User's Quick Guide," NFAIS, Philadelphia, March 1977 (see List of Useful Training Documents, Appendix 2)

FUNCTIONS	DIALOG	ORBIT
(3) OUTPUT		
Online printing	TYPE T ' (for printing terminals)	PRINT PRT
Formatting printout	Up to 10 defined formats for each file--see file descriptions	3 defined formats: default, FULL, TRIAL, or user defines by specifying field(s) to be printed
Specifying items to be printed	Specify set number, (format), sequence number of item or range of item numbers. Some default options as LRS' DIALOG	Specify set number, number (i.e., quantity) of items. Same default option as SDC's ORBIT SKIP
Offline printing	PRINT PR & (used as TYPE, above) PRINT-(print cancel)	PRINT OFFLINE (used as PRINT, above)
Interrupting online output	Available, but different from DIALOG: use(control key)-O	Available, but different from ORBIT: use (control key)-O
(4) SUPPORT FEATURES		
Erasing whole lines (errors) before transmitting	Available, but different Use (control key)-U	$ and Carriage Return
Erasing single character errors of input	(Delete key)	(Delete key)
Explanation	EXPLAIN (refers trainee to CALP modules)	EXPLAIN (refers trainee to CALP modules)
Providing description of search	DISPLAY SETS DS @	HISTORY (displays list of search statements, with all ORBIT options, e.g., range: HISTORY 6-10)
Assistance on procedures	Computer Assisted Learning Modules, and local phone, WATS line	Computer Assisted Learning Modules, and local phone, WATS line

Commands not implemented on TRAINER emulators include:

1. Housekeeping

   For DIALOG, none; for ORBIT: TIME, TIME INTERVAL, TIME RESET

2. Searching:

   For DIALOG:

   Viewing thesauri: EXPAND(WORD)
   Text searching: (W), (nW), (F), (C), (L), (S)
   Stacking commands
   Saving search strategies: END/SAVE, .RECALL, .EXECUTE, END/SDI, .RELEASE
   Restricting searches: LIMIT, LIMITALL, range searching, field qualifiers except AU=, /TI
   Range searching: :(colon)

   For ORBIT:

   Deleting search statements: ERASEALL, BACKUP, RESTART
   Text searching: STRINGSEARCH, SENSEARCH
   Stacking commands
   Saving search strategies: KEEP, SAVE, SAVE CANCEL, DELETE, SAVEOLD
   Creating search logic: SUBHEADINGS, SUBS
   Restricting searches: all except /AU, /IW, /TI, /IT

3. Output

   For DIALOG:

   Online display: DISPLAY D
   Sorting: .SORT

   For ORBIT:

   Sorting: SORT

4. Support Features

   For DIALOG: ?NEWS (TRAINER News goes out in opening CALP Modules), DISPLAY SETSn

   For ORBIT: NEWS, HELP, COMMENT, ORDER, RENAME SECURITY, VERSION, TERMINAL

CONTENTS

Login to the University of Pittsburgh Computer System, bringing up TRAINER 1

Explanation of CALP 2

List (index) of TRAINER Modules 3

Use of EXIT option to close a TRAINER session, and instructions for online communication to Trainee manager 4

1 Module 1 Accessing the Pitt System and the Learning Modules
Beginning Trainee 5
Experienced Trainee 8

2 Module 2 Accessing DIALOG and ORBIT through Networks
TYMNET - DIALOG practice 10
TELENET - ORBIT practice 12

Comments Module 2

We use the TELENET system to illustrate access to the SDC computer, and TYMNET to practice accessing the LRS computer. It would be a simple matter to extend this module, using the same teaching strategy, to allow the Trainee to choose to access either DIALOG or ORBIT on either network.

Once the governing conditions of accessing DIALOG or ORBIT are given:

1. Network name, service to be accessed
2. Speed and mode of terminal
3. Service password

the Trainee is expected to proceed, using data as given by the Services, or a copy of that data in the TRAINER Manual. This reflects, realistically, the situation a new online searcher meets when he first uses an online service.

The practice session is also realistic; the Trainee interprets the network access instructions as best he can, and uses them. However, if he asks for HELP, he will be told what the entry should be. If he makes an error, the program attempts to tell him exactly what it is: the common errors are looked for: e.g., if he forgets to space properly in the TELENET address or if the diagonal is forgotten in the ORBIT LOGIN.

Contents

Module 3 Learning the Basic Commands

	Page
. List of commands to be learned	15
. Use of HELP, EXPLAIN FILES, .FILEn, BEGIN_	16
. Use of EXPAND, E, SELECT, S, SELECT with E numbers	17
. Use of COMBINE, C, OR, +, TYPE, T (with set no. only)	18
. Use of TYPE, T, with format, item number, PRINT, PR, range of items	19
. Use of LOGOFF	20
. List of DIALOG commands, ?FILES	21
. EXPAND, E, SELECT, S, with E numbers, C, OR, T	22
. T with set, format, item number, PR with set, format, range of items	23

Module A DIALOG emulator used following Module 3

. ?FILES .FILE1 E MICROWAVE	24
. SE4 SE5 SE6 C1 + 2 + 3 SHAZARDS, EHAZARDS	25
. SE4 SE5 SE7 C9 + 10 c12 OR 8 C7 AND 13 T14 PR 14/5/1 LOGOFF (TRAINER) EXIT	26
. K/F	27

Comments

Notice that program directions or HELPS, not actually a part of the search practice, are set off by +'s in columns 1 and 70.

TYPE (DIALOG) Format of the type command is sometimes difficult for beginners to grasp; TYPE is treated more fully in Module 7. Since emulator practice is suggested for all Modules after Module 2, we introduce the simplest format (TYPE with Set Number, default options for format, item) in this first search experience.

In the first use of the DIALOG emulator, the Trainee uses only those commands practiced in Module 3; SELECTion of ranges of E numbers and the COMBINE shortcut are learned in later modules.

Contents

Module 4 Database Features

Page

General Introductory Material
- Login and bringing TRAINER online 28
- Reference to source of file descriptions in Manual, use of author qualifier (ORBIT), search on term from abstract field (ORBIT) 29
- Identifying author prefix (DIALOG), EAU= 30
- Choosing a file for access to title field 31

Use of DIALOG Database Files
- PREFIX codes, S AU=JONES, W?, reading file description (year field) 32
- Use of/TI, multiword descriptors, proximity (w) in single word fields ID, TI 33
- Use of multiword descriptors without qualifier 34
- (quick rerun of above). 35

Use of Module A, DIALOG emulator following use of Module 4
- S with /TI, C with AND, T with set number 37
- S with terms, C with *, T with set, format, Logoff, (Pitt System) K/F 38

Module 5 Negotiating Search Terms

Page

- Comparison of commands, DIALOG, ORBIT, SCORPIO 39
- EXPAND, E 40
- PAGE, P, EXPAND E number 41
- Interrupting output SELECT with E or R number 42
- Stem searching, S GALAX?, internal character substitution, S WOM?N 43
- Multiple internal character substitution, terminal character substitution 44
- Quick rerun of above 45

Use of Module A, DIALOG Emulator, following use of Module 5

- Use of RUN DIALOG, shortened access mode via TRAINER (bypasses List, Explain, Module choice options), .FILE6, ?FILES, !1 50
- E AU=, SAU=WEISS? 51
- T (INVALID USE), T 1/4/1-2, END 52
- E TERM, SE7-E8, S TETRA???ORIDE, C 3*4, T 4/5/1-2 53
- S CARBON TET?, T 5/1, SWOM?N, .FILE 8, SWOM?N 54

Contents

Module 6 Using Logical Operators

	Page
. General Introduction: OR, AND, NOT; broadening or narrowing strategy	56
. DIALOG operators and symbols, parenthesis; (), NOT, -, AND, *, OR +; optional summary of rules for use	57
. Use of complex logic, with parenthesis	58
. Use of DISPLAY SETS, complex logic	59
. Use of SELECT with range or series of E, R numbers, as logical OR	60
. Use of COMBINE with range of Set numbers	61
. Quick review of Module 6, use of SKIP to bypass long messages	62

Use of Module A, DIALOG Emulator following use of Module 6

. !1, S TERM?, C(1+2)*3, T4/2/1-2	66
. DS, T3*5, C(1+2+5)*3, T7/1	67
. .FILE, Sterm?, C8*9, T11/2	68
. .T10 (shows false drop due to truncation)	69

Module 7 Using Output Commands and Formats

	Page
. Use of intermediate, final output, statement of use of file documentation; contents of DIALOG practice	70
. When to use online, offline output; the TYPE statement syntax: set, format, item number	71
. PRINT, PR, range of item numbers, cancelling PRINT commands	72
. Reading file documentation, format 5	73
. Formats 2, 4 (ERIC)	74
. FORMAT 6 (NTIS), BEGIN and .FILE to end a search, start a new search	75
. LOGOFF, END	76
. Quick review of above	77

```
PITT↑C
↑C

.↑C

.I

PITT DEC-1099/A 603.89 13:06:35 TTY3 SYSTEM 1217/1239

LOG 134057/120121
JOB 32 PITT DEC-1099/A 603.89 TTY3  FRI 6-APR-79 1306
SWORD:
LAST LOGIN: 6-APR-79 0031
ITS REMAINING: 56.0   UNITS USED: 17.2

.TTY FI 2

.R CTLYST

  ..


CATALYST/II

06 APR 1979      13 07 08.3

LESSON.SECTION[P,PN]:TRAINER
ARE YOU CARUSO     ? ( TYPE YES OR NO) >/T
DO YOU WANT TO SEE ANY MAIL? >Y




STI SERVICES TRAINER
====================

COMPUTER ASSISTED LEARNING AND PRACTICE MODULES



TYPE IN THE NUMBER OF THE MODULE (1 THRU 7), OR
THE LETTER OF THE EMULATOR (A OR B), OR
L TO SEE THE LIST OF MODULES AND EMULATORS, OR
E FOR AN EXPLANATION:
```

>E

THESE CALP (COMPUTER-ASSISTED LEARNING AND PRACTICE) SEQUENCES ARE DESIGNED TO LET YOU TO PRACTICE ONLINE BIBLIOGRAPHIC SEARCHING IN A REAL COMPUTER ENVIRONMENT. THIS ENVIRONMENT, THOUGH "REAL", IS MORE TUTORIAL THAN WOULD BE ECONOMICAL IN A TRUE SEARCH SERVICE SYSTEM; YOUR RESPONSES WILL BE MORE CLOSELY ANALYZED, AND YOU WILL RECEIVE MORE SPECIFIC ERROR MESSAGES WHEN YOUR COMMANDS ARE NOT CORRECTLY ENTERED.

FREQUENTLY, THROUGHOUT THESE LESSONS, YOU WILL BE EXPECTED TO TYPE IN RESPONSES. WHEN A RESPONSE IS EXPECTED FROM YOU, THE SYSTEM WILL TYPE A PROMPT CHARACTER. THE CHARACTER IS >. TYPE IN YOUR RESPONSE AFTER THIS CHARACTER AND THEN HIT THE RETURN KEY <CR>. YOU MUST HIT <CR> AFTER EVERY RESPONSE.

NOTE THAT THE CALP MODULES ARE SELECTED BY NUMBER AND THE EMULATORS BY LETTER. THE NUMBERS AND LETTERS ARE FOR CONVENIENCE AND NOT NECESSARILY A SUGGESTED ORDER. YOU MAY DO THEM IN ANY ORDER YOU LIKE AND MAY REPEAT AS OFTEN AS YOU WISH.

IF AT ANY TIME YOU DO NOT KNOW WHAT SORT OF RESPONSE IS EXPECTED, HIT <CR>.

YOU MAY TERMINATE A SESSION AT ANY TIME BY TYPING EXIT.

TYPE ONE OF THE FOLLOWING:
MODULE NUMBER
EMULATOR LETTER
L TO SEE THE LIST OF MODULES AND EMULATORS
EXIT TO RETURN TO THE SYSTEM MONITOR (AND LOGOFF USING K/F)
>L

LESSON MODULES AND EMULATORS CURRENTLY IN THE PACKAGE INCLUDE:

1. ACCESSING THE PITT SYSTEM AND THE LEARNING MODULES	IF YOU KNOW HOW TO LOG IN SKIP THIS.
2. ACCESSING DIALOG AND ORBIT THROUGH NETWORKS	TO LEARN AND PRACTICE TYMNET AND TELENET PROCEDURES
3. LEARNING THE BASIC COMMANDS	A DIRECTED PRACTICE USE OF ALL THE BASIC COMMANDS (DIALOG AND/OR ORBIT)
4. DATABASE FEATURES	PROGRAMMED INSTRUCTION IN USE OF FIELD QUALIFIERS IN ENTERING SEARCH TERMS
5. NEGOTIATING SEARCH TERMS	PROGRAMMED INSTRUCTION IN SELECTION OF INDEX TERMS
6. USING LOGICAL OPERATORS	PROGRAMMED INSTRUCTION IN COMBINING TERMS TO BROADEN OR NARROW A SEARCH
7. USING OUTPUT COMMANDS AND FORMATS	PROGRAMMED INSTRUCTION IN USE OF PRINT AND TYPE COMMANDS
A. DIALOG	EMULATED SYSTEM WHICH ALLOWS PRACTICE OF COMMANDS AND TECHNIQUES LEARNED IN THE CALP MODULES
B. ORBIT	" " " "

TO GO TO ANY ONE OF THESE LESSON MODULES IMMEDIATELY, TYPE THE MODULE NUMBER OR THE EMULATOR LETTER (FROM THE LISTING).

```
TYPE ONE OF THE FOLLOWING:
MODULE NUMBER
EMULATOR LETTER
L TO SEE THE LIST OF MODULES AND EMULATORS
EXIT TO RETURN TO THE SYSTEM MONITOR (AND LOGOFF USING K/F)
>EXIT

IF YOU HAVE ANY QUESTIONS, COMMENTS, PROBLEMS:
AFTER THE MONITOR PROMPT (.) TYPE R MAIL AND FOLLOW THIS FORM:
 .R MAIL
TO:134057,120121
YOUR MESSAGE ENDING WITH CONTROL Z (↑Z)
TO:↑Z (USE ↑Z AFTER THE SECOND TO: TO EXIT FROM THE MAIL PROGRAM.)

YOU CAN RETRIEVE YOUR ANSWER BY RUNNING THE MAIL PROGRAM
AGAIN THE NEXT DAY.


TOTAL ELAPSED TIME FOR THIS LESSON IS 0:14:31.6


EXIT

.
```

>1

MODULE 1 -- ACCESSING THE PITT SYSTEM AND THE LEARNING MODULES
==========

SINCE YOU ARE OPERATING THIS PACKAGE ON THE UNIVERSITY OF PITTSBURGH'S COMPUTER SYSTEM, YOU WILL HAVE TO "LOGIN" TO THE SYSTEM THE NEXT TIME THAT YOU WANT TO HAVE A TRAINING SESSION. (IF THIS PRACTICE IS NOT NEEDED, TYPE EXIT.)

WE WILL GO THROUGH A DEMONSTRATION OF THE LOGIN PROCEDURE (WHICH IS DESCRIBED IN DETAIL IN YOUR MANUAL). ASSUME THAT YOUR USAGE NUMBER IS 123456,654321 AND THAT YOUR PASSWORD IS MYWORD .

PROCEED WITH YOUR LOGIN, BEGINNING WITH THE 'I' COMMAND:
(IF YOU ARE USING A DIAL-UP TERMINAL THE APPROPRIATE COMMAND IS <CONTROL KEY>C (↑C), BUT DO NOT PRACTICE IT HERE OR IT WILL ABORT THIS PROGRAM.)

.>HELP

+ YOU SHOULD TYPE IN ONLY AN I AND HIT THE RETURN (OR CR). +
+ (↑C IS ALSO ACCEPTABLE ON THE SYSTEM, BUT NOT IN THIS LESSON.) +

.>I

PITT DEC-1099/B 603.19 13 10 46 TTY141 SYSTEM 1240/1237
PLEASE LOGIN OR ATTACH

.>HELP

+ REREAD THE IDENTIFYING MESSAGE THE SYSTEM JUST PRINTED. +

+ YOUR TERMINAL IS ATTACHED TO SYSTEM B AND YOU MUST USE ONLY +
+ SYSTEM A. USE THE TTY SYS A COMMAND TO SWITCH TO SYSTEM A. +

.>TT SY A

PITT DEC-1099/A 603.19 13 11 07 TTY141 SYSTEM 1217/1239
PLEASE LOGIN OR ATTACH

.>HELP

+ YOUR ENTRY SHOULD BE LOG 123456/654321 +

.>LOG 123456654321

+ YOUR ENTRY SHOULD BE LOG 123456/654321 +

```
.>LOG 123456/654321
JOB 19 PITT DEC-1099/A 603.19 TTY141
PASSWORD:>

+    YOUR ENTRY MUST BE   MYWORD . REMEMBER, SINCE THE PASSWORD      +
+    IS A "SECRET CODE", IT DOES NOT PRINT ON YOUR TERMINAL WHEN     +
+    YOU TYPE IT.                                                    +

PASSWORD:>

LAST LOGIN: 28-NOV-78 0223
UNITS REMAINING: 4.4   UNITS USED: 27.2


.>HELP

+     YOU SHOULD NOW TYPE R CTLYST                                  +

.>R CTLYST

+    GOOD, NOW TRY THE LOGIN AGAIN. THIS TIME, HOWEVER,             +
+    EXACTLY AS IT WOULD BE WITHOUT EXTRA FEEDBACK.                 +

.>LOG 123456/654321

+    REMEMBER TO TYPE I FIRST. TRY AGAIN:                          +

.>I
PITT DEC-1099/A 603.19 13 12 38  TTY25
PLEASE LOGIN OR ATTACH

.>TTY SY A
PITT DEC-1099/A 603.19 13 12 44  TTY25
PLEASE LOGIN OR ATTACH

.>LOG 123456,654321
JOB 29  PITT DEC-1099/A  603.19  TTY25
PASSWORD:>

LAST LOGIN: 28-NOV-78 0223
UNITS REMAINING: 4.4   UNITS USED: 27.7


.>HELP

 ?FILE NOT FOUND

+    YOU MUST NOW TYPE    R CTLYST                                  +

.>R CTLYSTT

 ?FILE NOT FOUND

+    YOU MUST NOW TYPE    R CTLYST                                  +

.>R CTLYST

CATALYST/II

"06 APR 1979     13 13 31"
```

```
LESSON.SECTION[P,PN]:>HELP

+     BE CAREFUL! ON THE COMPUTER, CAPITAL O                          +
+     IS DIFFERENT FROM THE NUMBER 0 AND THE                          +
+     LETTER L CANNOT SUBSTITUTE FOR THE NUMBER 1.                    +


+     YOU MUST TYPE TRAINER[134057,120121]                            +

LESSON.SECTION[P,PN]:>TRAINER(123456,654321)

+     YOU MUST TYPE TRAINER[134057,120121]                            +

LESSON.SECTION[P,PN]:>TRAINER[134057,120121]

  .... AND YOU'RE IN THE TRAINING SESSION.


+     YOU MAY TERMINATE A CALP MODULE ANYTIME YOU WISH BY TYPING      +
+     EXIT WHEN A RESPONSE IS REQUESTED. THIS WILL TAKE YOU BACK TO   +
+     THE TABLE OF CONTENTS WHERE YOU MAY SELECT ANOTHER MODULE OR    +
+     AN EMULATOR OR EXIT FROM THE CALP PACKAGE.                      +

+     THE PROCEDURE FOR LOGOFF IS DESCRIBED IN YOUR MANUAL P.1-2.     +
+     ASK THE SYSTEM TO KILL YOUR JOB:                                +

.>HELP

+     NO, YOU SHOULD TYPE EITHER K/F OR KJOB/F.                       +

.>K/F
JOB 19 [123456,654321] OFF TTY141 AT 13 14 06 APR 1979 CONNECT=21 MIN
SAVED ALL FILES (35 BLOCKS)
CPU 0:05  TAPEIO=0  CORE HWM=11P  UNITS=0.0139 ($1.04)

+     ONCE YOU HAVE RECEIVED SUCH A MESSAGE, YOU WILL KNOW THAT YOU   +
+     ARE OFF THE SYSTEM.  TURN OFF YOUR TERMINAL, AND, IF YOU ARE    +
+     ON A DIALUP, HANG UP YOUR PHONE.                                +


TYPE ONE OF THE FOLLOWING:
MODULE NUMBER
EMULATOR LETTER
L TO SEE THE LIST OF MODULES AND EMULATORS
EXIT TO RETURN TO THE SYSTEM MONITOR (AND LOGOFF USING K/F)
>1
```

MODULE 1 -- ACCESSING THE PITT SYSTEM AND THE LEARNING MODULES

Since you are operating this package on the University of Pittsburgh's computer system, you will have to "LOGIN" to the system the next time that you want to have a training session. (If this practice is not needed, type EXIT.)

We will go through a demonstration of the LOGIN procedure (which is described in detail in your manual). Assume that your usage number is 123456,654321 and that your PASSWORD is MYWORD .

Proceed with your LOGIN, beginning with the 'I' command:
(If you are using a dial-up terminal the appropriate command is <control key>C (↑C), but do not practice it here or it will abort this program.)

```
.>I

PITT DEC-1099/B 603.19 13 15 59 TTY141 system 1240/1237
Please LOGIN or ATTACH

.>TTY SYS A

PITT DEC-1099/A 603.19 13 16 07 TTY141 system 1217/1239
Please LOGIN or ATTACH

.>LOG 123456/654321
JOB 19 PITT DEC-1099/A 603.19 TTY141
password:>

Last login: 28-Nov-78 0223
Units remaining: 4.4   Units used: 27.2


.>R CTLYST
```

```
+     Good, now try the LOGIN again. This time, however,          +
+     exactly as it would be without extra feedback.              +
```

```
.>I
PITT DEC-1099/A 603.19 13 16 41  TTY25
PLEASE LOGIN OR ATTACH

.>TTY SY A
PITT DEC-1099/A 603.19 13 16 47  TTY25
PLEASE LOGIN OR ATTACH

.>LOG 123456/654321
JOB 29  PITT DEC-1099/A  603.19  TTY25
PASSWORD:>

LAST LOGIN: 28-NOV-78 0223
UNITS REMAINING: 4.4   UNITS USED: 27.7


.>R CTLYST

CATALYST/II

"06 APR 1979     13 17 12"

LESSON.SECTION[P,PN]:>TRAINER[134057,120121]

 .... AND YOU'RE IN THE TRAINING SESSION.


+    YOU MAY TERMINATE A CALP MODULE ANYTIME YOU WISH BY TYPING       +
+    EXIT WHEN A RESPONSE IS REQUESTED. THIS WILL TAKE YOU BACK TO   +
+    THE TABLE OF CONTENTS WHERE YOU MAY SELECT ANOTHER MODULE OR    +
+    AN EMULATOR OR EXIT FROM THE CALP PACKAGE.                      +

+    THE PROCEDURE FOR LOGOFF IS DESCRIBED IN YOUR MANUAL P.1-2.     +
+    ASK THE SYSTEM TO KILL YOUR JOB:                                +

.>2

+    NO, YOU SHOULD TYPE EITHER K/F OR KJOB/F.                       +

.>K/F
JOB 19 [123456,654321] OFF TTY141 AT 13 18 06 APR 1979 CONNECT=21 MIN
SAVED ALL FILES (35 BLOCKS)
CPU 0:05  TAPEIO=0  CORE HWM=11P  UNITS=0.0139 ($1.04)


+    ONCE YOU HAVE RECEIVED SUCH A MESSAGE, YOU WILL KNOW THAT YOU   +
+    ARE OFF THE SYSTEM.  TURN OFF YOUR TERMINAL, AND, IF YOU ARE    +
+    ON A DIALUP, HANG UP YOUR PHONE.                                +


TYPE ONE OF THE FOLLOWING:
MODULE NUMBER
EMULATOR LETTER
L TO SEE THE LIST OF MODULES AND EMULATORS
EXIT TO RETURN TO THE SYSTEM MONITOR (AND LOGOFF USING K/F)
>2
```

```
MODULE 2 -- ACCESSING DIALOG AND ORBIT THROUGH NETWORKS
=======================================================

        In this module you can practice accessing a Search Service
using the TYMNET and TELENET networks.  The  steps covered are:

        1. Turn on the terminal, dial the Network telephone number,
           and place the phone handset in the acoustic coupler.
        2. Identify your terminal to the Network Computer.
        3. Tell the network computer which Search Service you want to
           use.
        4. Identify yourself to the Search Service computer.

Refer to the Trainer Manual, p.5-8, or DIALOG and/or ORBIT Guides.

        Type TYMNET or TELENET for access practice or type DONE.
>TYMNET
---  TYMNET Practice  ---


+       SITUATION:  You have dialed into TYMNET and have placed       +
+       your handset in the acoustic coupler.  You are using a        +
+       30 cps PRINTING terminal in FULL duplex mode.  Proceed        +
+       to access DIALOG with MYWORD as your DIALOG password:         +

please type your terminal identifier>

+     In this situation, E is appropriate.                            +
+     Note that this entry does not print on your terminal.           +

please type your terminal identifier>

+     In this situation, E is appropriate.                            +
+     Note that this entry does not print on your terminal.           +

please type your terminal identifier>

-1072-03--
please log in:>HELP

        Enter LRS for DIALOG (Lockheed Retrieval System).


-1072-03--
please log in:>LRS

password:>

        Enter DIALOG to identify the Search Service.
     Note: network suppresses online printing--DIALOG is considered
     to be a secret password.
```

```
PASSWORD:>

TC>  HOST IS ONLINE


ENTER YOUR DIALOG PASSWORD:
■■■■■■■■■
          LOGON File1   06 APR 1979  13 20 15


 ?
        ... AND YOU'RE INTO DIALOG.


        Type TYMNET or TELENET for access practice or type DONE.
>TYMNET
---  TYMNET Practice  ---


+       SITUATION:  You have dialed into TYMNET and have placed       +
+       your handset in the acoustic coupler.  You are using a        +
+       30 cps PRINTING terminal in FULL duplex mode.  Proceed        +
+       to access DIALOG with MYWORD as your DIALOG password:         +

PLEASE TYPE YOUR TERMINAL IDENTIFIER>

-1072-03--
PLEASE LOG IN:>LRS;DIALOG

TC>  HOST IS ONLINE


ENTER YOUR DIALOG PASSWORD:
■■■■■■■■■
Bad password 13 21 00

ENTER YOUR DIALOG PASSWORD:
■■■■■■■■■
          LOGON File1   06 APR 1979  13 21 08


 ?
        ... AND YOU'RE INTO DIALOG.


        Type TYMNET or TELENET for access practice or type DONE.
>DONE
```

STI SERVICES TRAINER
====================

COMPUTER ASSISTED LEARNING AND PRACTICE MODULES

TYPE IN THE NUMBER OF THE MODULE (1 THRU 7), OR
THE LETTER OF THE EMULATOR (A OR B), OR
L TO SEE THE LIST OF MODULES AND EMULATORS, OR
E FOR AN EXPLANATION:

>2

MODULE 2 -- ACCESSING THE COMMUNICATIONS NETWORK
==

IN THIS MODULE YOU CAN PRACTICE ACCESSING A SEARCH SERVICE USING THE TYMNET AND TELENET NETWORKS. THE STEPS COVERED ARE:

1. TURN ON THE TERMINAL, DIAL THE NETWORK TELEPHONE NUMBER, AND PLACE THE PHONE HANDSET IN THE ACOUSTIC COUPLER.
2. IDENTIFY YOUR TERMINAL TO THE NETWORK COMPUTER.
3. TELL THE NETWORK COMPUTER WHICH SEARCH SERVICE YOU WANT TO USE.
4. IDENTIFY YOURSELF TO THE SEARCH SERVICE COMPUTER.

REFER TO THE TRAINER MANUAL, P.5-8, OR DIALOG AND/OR ORBIT GUIDES.

100

```
        TYPE TYMNET OR TELENET FOR ACCESS PRACTICE OR TYPE DONE.
>TELENET
---  TELENET PRACTICE  ---

+        SITUATION:  YOU HAVE DIALED INTO TELENET AND HAVE PLACED     +
+       YOUR HANDSET IN THE ACOUSTIC COUPLER.  YOU ARE USING A        +
+       30 CPS PRINTING TERMINAL IN FULL DUPLEX MODE.  PROCEED        +
+       TO ACCESS ORBIT WITH MYWORD AS YOUR USERID:

>
>
TELENET
412 DJ3

TERMINAL=>

 @ >C 21333

       YOU GOT THE RIGHT CHARACTERS, BUT SPACING IS IMPORTANT HERE.
       TRY AGAIN.


 @ >C 213 33


213 33L CONNECTED
>/LOGIN

      AT THIS POINT YOU ARE IN COMMUNICATION WITH THE SDC COMPUTER.
      NOW YOU SHOULD LOG IN.



213 33L CONNECTED
>LOGIN MYWORD

      TRY /LOGIN MYWORD
      THE CHARACTER / IS PART OF YOUR ENTRY AND MUST BE TYPED.


213 33L CONNECTED
>/LOGIN MYWORD

HELLO FROM SDC/ORBIT ...

        ... AND YOU'RE INTO ORBIT.
```

```
        TYPE TYMNET OR TELENET FOR ACCESS PRACTICE OR TYPE DONE.
>TELENET
---  TELENET PRACTICE  ---

+        SITUATION:  YOU HAVE DIALED INTO TELENET AND HAVE PLACED     +
+       YOUR HANDSET IN THE ACOUSTIC COUPLER.  YOU ARE USING A        +
+       30 CPS PRINTING TERMINAL IN FULL DUPLEX MODE.  PROCEED        +
+       TO ACCESS ORBIT WITH MYWORD AS YOUR USERID:

>
>
TELENET
412 DJ3

TERMINAL=>

 @ >C 213 33


213 33L CONNECTED
>/LOGIN MYWORD

HELLO FROM SDC/ORBIT ...

        ... AND YOU'RE INTO ORBIT.


        TYPE TYMNET OR TELENET FOR ACCESS PRACTICE OR TYPE DONE.
>DONE

TYPE ONE OF THE FOLLOWING:
MODULE NUMBER
EMULATOR LETTER
L TO SEE THE LIST OF MODULES AND EMULATORS
EXIT TO RETURN TO THE SYSTEM MONITOR (AND LOGOFF USING K/F)
>A
```

```
Type one of the following:
Module number
Emulator letter
L to see the list of modules and emulators
EXIT to return to the system monitor (and logoff using K/F)
>3


MODULE 3 -- LEARNING THE BASIC COMMANDS
=======================================


        This module is concerned with the basics of searching the online
STI systems.  Practice in doing a simple search is included.

Please select a system from the list below or type DONE.

        DIALOG
        ORBIT
        SCORPIO (not currently available)

>DIALOG
        This module will provide practice for the following DIALOG
commands.  They are listed in the sequence in which they are
to be practiced:

        EXPLAIN
        BEGIN
        EXPAND
        SELECT
        COMBINE
        TYPE
        PRINT
        LOGOFF

        Any time you are NOT sure of what step is next in the practice,
either type HELP or just DO NOTHING (in 60 seconds the program will
automatically give help.
```

```
+       SITUATION:  YOU ARE LOGGED INTO DIALOG AND WISH TO DO A       +
+       SEARCH ON AIRCRAFT SIMULATION.  YOU ARE USING A PRINTING      +
+       TERMINAL.  YOUR FIRST TASK IS TO GET THE FILE APPROPRIATE     +
+       TO THIS QUESTION ONLINE FOR SEARCHING.                        +

♦♦♦♦♦♦♦♦♦  LOGON FILE29  10 54 58


?>HELP

+       THE APPROPRIATE STEP, IF YOU DON'T KNOW WHICH FILES ARE       +
+       AVAILABLE, IS TO USE THE EXPLAIN FILES COMMAND.  YOU COULD    +
+       TYPE EXPLAIN FILES OR ?FILES TO GET A LIST OF FILES           +
+       AVAILABLE TO YOU.                                             +

?>EXPLAIN FILES
 1    -ERIC RIE CIJE              6    -NTIS
 9    -AIM/ARM                   12    -INSPEC-PHYSICS
29    -METEOR/GEO ABS            34    -SCISEARCH

?>HELP

+       SINCE, IN THE LOGON MESSAGE ABOVE, YOU LOGGED ON WITH FILE    +
+       29 (METEOR/GEO ABS), BUT FILE 6 (NTIS) IS MOST LIKELY TO      +
+       CONTAIN MATERIAL ON AIRCRAFT, IT IS APPROPRIATE TO SWITCH     +
+       TO FILE 6, USING THE BEGIN6 (OR, IF YOU PREFER, .FILE6)       +
+       COMMAND.                                                      +

?>FILE 6

+       TYPE BEGIN6 OR .FILE6                                         +

?>.FILE6

28 MAR 1979   10 56 13
$0.57   0.009 HOURS IN FILE 29
FILE   06:NTIS      1964-1977     ISSD1
                SET    ITEMS     DESCRIPTION
                ===    =====     ===========

?>HELP

+       IF YOU WANT TO SEE IF YOUR TERM IS IN THE FILE, THE           +
+       APPROPRIATE COMMAND IS EXPAND WHICH CAUSES A DISPLAY OF       +
+       THE TERMS IN THE INDEX ALPHABETICALLY CLOSE TO THE TERM WITH  +
+       "YOUR" TERM IN SIXTH (E6) POSITION (THE DISPLAY SHOWS 5       +
+       "ABOVE" AND 10 "BELOW" YOUR TERM).  ALSO SHOWN ARE THE        +
+       NUMBER OF ITEMS INDEXED FOR EACH TERM AND THE NUMBER OF       +
+       "RELATED TERMS" (RT), IF ANY, FOR EACH.  SINCE YOUR PRACTICE  +
+       TERM IS AIRCRAFT SIMULATION, YOU SHOULD TYPE                  +
+       EXPAND AIRCRAFT SIMULATION OR E AIRCRAFT SIMULATION TO        +
+       RECEIVE A DISPLAY (EXPAND MAY BE SHORTENED TO E).             +
```

```
?>EXPAND

+       TYPE E OR EXPAND FOLLOWED BY AIRCRAFT SIMULATION                +

?>E AIRCRAFT SIMLATION
REF     INDEX-TERM                              TYPE  ITEMS  RT
E1     AIRCRAFT-----------------------------    2074
E2     AIRCRAFT DESIGN----------------------     123
E3     AIRCRAFT FLIGHT TESTING--------------      72
E4     AIRCRAFT MAINTENANCE-----------------     127
E5     AIRCRAFT RESEARCH--------------------     273
E6    -AIRCRAFT SIMULATION------------------      97
E7     AIRCRAFT TESTING---------------------     147
 :       :                                        :
 :       :                                        :
E16    AIRFOIL------------------------------     247

?>HELP

+       SINCE YOUR TERM, E6, IS USED IN 97 ITEMS, YOU WILL WISH TO      +
+       SELECT THIS TERM.  USE THE SELECT COMMAND AND TYPE SELECT E6    +
+       OR SELECT AIRCRAFT SIMULATION (SELECT MAY BE SHORTENED TO S).+

?>S)

+       TYPE S OR SELECT FOLLOWED BY EITHER E6 OR AIRCRAFT              +
+       SIMULATION                                                      +

?>S AIRCRAFT SIMULATION

               1       97      E6:AIRCRAFT SIMULATION

+       GOOD. YOU HAVE SELECTED E6 AS SET 1 WITH 97 ITEMS.  NOW,        +
+       SINCE AIRCRAFT RESEARCH IS OFTEN USED AS A SYNONYM FOR          +
+       AIRCRAFT SIMULATION, SELECT E5, AIRCRAFT RESEARCH, ALSO.        +

?>S

+       DO THE SAME THING YOU DID FOR SELECTING E6.  TYPE S E5 OR       +
+       S AIRCRAFT RESEARCH.                                            +

?>S AIRCRAFT RESEARCH

               2      273      E5:AIRCRAFT RESEARCH
```

```
?>HELP

+       SINCE E5 AND E6 ARE CONSIDERED SYNONYMOUS FOR OUR EXAMPLE,      +
+       THE APPROPRIATE STEP IS TO COMBINE THE TWO SELECTED SETS.       +
+       SINCE WE ARE INTERESTED IN ALL THE ITEMS IN BOTH SETS, AN OR    +
+       IS APPROPRIATE.  TYPE COMBINE 1 OR 2 (COMBINE MAY BE           +
+       SHORTENED TO C).                                                +

?>COMBINE

+       TYPE C 1 OR 2 OR TYPE COMBINE 1 OR 2                            +
+       (YOU MAY USE A + INSTEAD OF OR IF YOU WISH.)                    +

?>C1+2
              3     310     1OR2

+       NOTICE THAT IN 60 ITEMS, E5 AND E6 BOTH OCCUR SO THAT THE       +
+       ACTUAL TOTAL IS 310 ITEMS INSTEAD OF 370.                       +

+       NOW ISSUE A COMMAND TO SEE A REFERENCE FROM SET 3.              +
+       DON'T SPECIFY ANY FORMAT OR ITEM(S), JUST THE SET NUMBER.       +

?>TYPE SET 3

+       JUST TYPE T3 OR TYPE3                                           +

?>T3
3/2/1
COMPUTER PROGRAMS FOR PREDICTION OF LIGHTNING INDUCED VOLTAGES IN AIRC
RAFT ELECTRICAL CIRCUITS.
GENERAL ELECTRIC CORPORATE RESEARCH AND DEVELOPMENT SCHENECTADY N Y•AI
R FORCE FLIGHT DYNAMICS LAB., WRIGHT-PATTERSON AFB, OHIO.   (406617)
FINAL REPT. 1 FEB-30 NOV 74
AUTHOR: MAXWELL, K. J.; FISHER, F. A.; PLUMER, J. A.; ROGERS, P. R.
C535289     FLD: 1C, 9B 51C, 49   GRAI7524
APR 75   161P
REPT NO: SRD-75-005 CONTRACT: F33615-74-C-3068      PROJECT: AF-680J
MONITOR: AFFDL-TR-75-36-VOL-1 SEE ALSO VOLUME 2, AD-A014 835.    DESCR
IPTORS: •TRANSIENT RADIATION EFFECTS, •AIRCRAFT EQUIPMENT, •LIGHTNING,
 •COMPUTER PROGRAMS, CIRCUITS, ELECTRICAL EQUIPMENT, SURGES, MAGNETIC
FIELDS, PREDICTIONS IDENTIFIERS: DIFFUSION COMPUTER PROGRAM, APERTURE
COMPUTER PROGRAM, NTISDODAF

+       NOTICE THAT DIALOG GAVE YOU ONE ITEM IN FORMAT 2.  THE ITEM     +
+       IS LABELED:  SET NO. 3, FORMAT 2, ITEM 1.                       +
```

```
+       Now use the complete TYPE command.  Ask for set 3, in format +
+       6, item 8.                                                    +
?>HELP

+       The appropriate command is TYPE (which may be shortened      +
+       to T) and the form is TYPE s/f/i where s is the set number,   +
+       f is the format number, and i is the item number or range     +
+       of numbers.                                                   +

?>T3 6 8

+       Type T 3/6/8                                                  +

?>T 3/6/8
3/6/8
PB-273   774/5ST     NTIS PRICE $5.30/MF $2.10
AIRCRAFT SIMULATION AS USED IN COMMERCIAL PILOT TRAINING: NASA
AUG 76     137P

+       Now, ask to have all items in set 3 printed offline in        +
+       format 5.  (LRS mails them to you overnight.)                 +

?>PRT 3/5

+       The appropriate command is PRINT (which may be shortened to  +
+       PR) and uses the same form as TYPE. Use PRINT 3/5/1-310.      +

?>PRINT 3/5/1-300

+       The appropriate command is PRINT (which may be shortened to  +
+       PR) and uses the same form as TYPE. Use PRINT 3/5/1-310.      +

?>PR 3/5/1-310
PRINT 3/5/1-310

+       Now that DIALOG has confirmed items 1-310 for printing, you   +
+       are finished for this session.                                +

?>HELP

+       The appropriate command is LOGOFF which will terminate your  +
+       DIALOG session and return you to the Network computer         +
+       (though on the PITT emulator, LOGOFF returns you to the       +
+       PITT monitor).                                                +
```

```
?>LOGOFF
28 MAR 1979   11 02 36
$2.37    0.067 HOURS IN FILE6
$31.00   310 PRINTS
$33.37    ESTIMATED TOTAL COST
LOGOFF    @ 11 02 36
```

```
+       NOW THAT YOU HAVE PRACTICED THESE DIALOG SYSTEM OPERATIONS,  +
+       YOU SHOULD BE READY TO TRY A SAMPLE SEARCH ON THE DIALOG     +
+       EMULATOR.  SEE P. 64 OF TRAINER MANUAL FOR SUGGESTIONS       +
+       OF QUERIES TO USE ON THE DIALOG EMULATOR.  REPEAT THIS       +
+       MODULE UNTIL YOU CAN USE THE COMMANDS AUTOMATICALLY.         +
```

```
PLEASE SELECT A SYSTEM FROM THE LIST BELOW OR TYPE DONE.

        DIALOG
        ORBIT
        SCORPIO (NOT CURRENTLY AVAILABLE)

>DIALOG
        THIS MODULE WILL PROVIDE PRACTICE FOR THE FOLLOWING DIALOG
COMMANDS.  THEY ARE LISTED IN THE SEQUENCE IN WHICH THEY ARE
TO BE PRACTICED:

        EXPLAIN
        BEGIN
        EXPAND
        SELECT
        COMBINE
        TYPE
        PRINT
        LOGOFF

        ANY TIME YOU ARE NOT SURE OF WHAT STEP IS NEXT IN THE PRACTICE,
EITHER TYPE HELP OR JUST DO NOTHING (IN 60 SECONDS THE PROGRAM WILL
AUTOMATICALLY GIVE HELP.


+       SITUATION:  YOU ARE LOGGED INTO DIALOG AND WISH TO DO A       +
+       SEARCH ON AIRCRAFT SIMULATION.  YOU ARE USING A PRINTING      +
+       TERMINAL.  YOUR FIRST TASK IS TO GET THE FILE APPROPRIATE     +
+       TO THIS QUESTION ONLINE FOR SEARCHING.                        +

♦♦♦♦♦♦♦♦♦  LOGON FILE29  11 03 37


?>?FILES
 1   -ERIC RIE CIJE              6   -NTIS
 9   -AIM/ARM                   12   -INSPEC-PHYSICS
29   -METEOR/GEO ABS            34   -SCISEARCH

?>BEGIN6

28 MAR 1979   11 04 10
$0.57   0.009 HOURS IN FILE 29
FILE   06:NTIS      1964-1977    ISS01
                SET   ITEMS    DESCRIPTION
                ===   =====    ===========
```

```
?>EAIRCRAFT SIMULATION
REF     INDEX-TERM                          TYPE  ITEMS  RT
E1     AIRCRAFT-------------------------------    2074
E2     AIRCRAFT DESIGN------------------------     123
E3     AIRCRAFT FLIGHT TESTING----------------      72
E4     AIRCRAFT MAINTENANCE-------------------     127
E5     AIRCRAFT RESEARCH----------------------     273
E6    -AIRCRAFT SIMULATION--------------------      97
E7     AIRCRAFT TESTING-----------------------     147
 :       :                                          :
 :       :                                          :
E16    AIRFOIL--------------------------------     247

?>SE6

                1       97      E6:AIRCRAFT SIMULATION

+       GOOD. YOU HAVE SELECTED E6 AS SET 1 WITH 97 ITEMS.  NOW,      +
+       SINCE AIRCRAFT RESEARCH IS OFTEN USED AS A SYNONYM FOR        +
+       AIRCRAFT SIMULATION, SELECT E5, AIRCRAFT RESEARCH, ALSO.      +

?>SE5

                2      273      E5:AIRCRAFT RESEARCH
?>C1OR2
                3      310      1OR2

+       NOTICE THAT IN 60 ITEMS, E5 AND E6 BOTH OCCUR SO THAT THE     +
+       ACTUAL TOTAL IS 310 ITEMS INSTEAD OF 370.                     +

+       NOW ISSUE A COMMAND TO SEE A REFERENCE FROM SET 3.            +
+       DON'T SPECIFY ANY FORMAT OR ITEM(S), JUST THE SET NUMBER.     +

?>T 3
3/2/1
COMPUTER PROGRAMS FOR PREDICTION OF LIGHTNING INDUCED VOLTAGES IN AIRC
RAFT ELECTRICAL CIRCUITS.
GENERAL ELECTRIC CORPORATE RESEARCH AND DEVELOPMENT SCHENECTADY N Y♦AI
R FORCE FLIGHT DYNAMICS LAB., WRIGHT-PATTERSON AFB, OHIO.   (406617)
FINAL REPT. 1 FEB-30 NOV 74
AUTHOR: MAXWELL, K. J.; FISHER, F. A.; PLUMER, J. A.; ROGERS, P. R.
C535289     FLD: 1C, 9B 51C, 49   GRAI7524
APR 75   161P
REPT NO: SRD-75-005 CONTRACT: F33615-74-C-3068      PROJECT: AF-680J
MONITOR: AFFDL-TR-75-36-VOL-1 SEE ALSO VOLUME 2, AD-A014 835.    DESCR
IPTORS: ♦TRANSIENT RADIATION EFFECTS, ♦AIRCRAFT EQUIPMENT, ♦LIGHTNING,
 ♦COMPUTER PROGRAMS, CIRCUITS, ELECTRICAL EQUIPMENT, SURGES, MAGNETIC
FIELDS, PREDICTIONS IDENTIFIERS: DIFFUSION COMPUTER PROGRAM, APERTURE
COMPUTER PROGRAM, NTISDODAF

+       NOTICE THAT DIALOG GAVE YOU ONE ITEM IN FORMAT 2.  THE ITEM   +
+       IS LABELED:  SET NO. 3, FORMAT 2, ITEM 1.                     +
```

110

```
+       Now use the complete TYPE command.  Ask for set 3, in format +
+       6, item 8.                                                    +
?>Y3/6/8

+       The appropriate command is TYPE (which may be shortened       +
+       to T) and the form is TYPE S/F/I where S is the set number,   +
+       F is the format number, and I is the item number or range     +
+       of numbers.                                                   +

?>T↑U
PR 3/5/1-310

+       Type T 3/6/8                                                  +

?>T 3/6/8
3/6/8
PB-273   774/5ST     NTIS PRICE $5.30/MF $2.10
AIRCRAFT SIMULATION AS USED IN COMMERCIAL PILOT TRAINING: NASA
AUG 76     137P

+       Now, ask to have all items in set 3 printed offline in        +
+       format 5.  (LRS mails them to you overnight.)                 +

?>PR 3/5/1-310
PRINT 3/5/1-310

+       Now that DIALOG has confirmed items 1-310 for printing, you   +
+       are finished for this session.                                +

?>LOGOFF
28 MAR 1979   11 07 53
$2.37   0.067 HOURS IN FILE6
$31.00  310 PRINTS
$33.37   ESTIMATED TOTAL COST
LOGOFF   @ 11 07 53

+       Now that you have practiced these DIALOG system operations,   +
+       you should be ready to try a sample search on the DIALOG      +
+       emulator.  See p. 11 of Trainer Manual for suggestions        +
+       of queries to use on the DIALOG emulator.  Repeat this        +
+       module until you can use the commands automatically.          +


Please select a system from the list below or type DONE.

        DIALOG
        ORBIT
        SCORPIO (not currently available)

>DONE
```

```
TYPE ONE OF THE FOLLOWING:
MODULE NUMBER
EMULATOR LETTER
L TO SEE THE LIST OF MODULES AND EMULATORS
EXIT TO RETURN TO THE SYSTEM MONITOR (AND LOGOFF USING K/F)
>A




ENTER YOUR DIALOG PASSWORD>DEC
          LOGON FILE 1 11:08:40


?>?FILES
       1  -NTIS
       2  -OCEANIC ABSTRACTS
       3  -ENGINEERING INDEX
       4  -CAS CONDENSATES
       5  -SOCIOLOGICAL ABS
       6  -ABI/INFORM
       7  -BIOSIS
       8  -PSYCH ABSTRACTS
       9  -ERIC


?>.FILE1
         28-MAR-79 11:09:52.9USER DEC
 $0.00      .001 HOURS IN FILE 1
FILE 1:NTIS

            SET ITEMS DESCRIPTION
            +++ +++++ ++++++++++++

?>E MICROWAVE EQUIPMENT
 REF    INDEX-TERM              TYPE ITEMS RT
E 1    MICROPROGRAMMING     -------     1
E 2    MICROSCOPY           -------     1
E 3    MICROSTRUCTURE       -------     3
E 4    MICROWAVE            -------     6
E 5    MICROWAVE ANTENNAS   -------     1
E 6   -MICROWAVE EQUIPMENT  -------
E 7    MICROWAVE FREQUENCY  -------     1
E 8    MICROWAVE RADIOBIOLO-------     1
E 9    MICROWAVE TUBES      -------     1
E10    MICROWAVES           -------     4
E11    MIGRATION            -------     1
E12    MIGRATSIYU           -------     1
E13    MIL                  -------     1
E14    MILITARY             -------    10
E15    MILITARY ENGINEERING-------     1
E16    MILITARY FACILITIES  -------     2
E17    MILITARY FORCES(FORE-------     1
```

```
                                        -MORE-
?>SE4
              1    6   MICROWAVE

?>SE5
              2    1   MICROWAVE ANTENNAS

?>SE6
NO PREVIOUS DISPLAY- ITEM REQUEST NOT SERVICEABLE
?>SE7
              3    1   MICROWAVE FREQUENCY

?>SE8
              4    1   MICROWAVE RADIOBIOLO

?>SE9
              5    1   MICROWAVE TUBES

?>SE10
              6    4   MICROWAVES

?>C1+2+3+4+5+6
              7    6    1+2+3+4+5+6
?>SHAZARDS
              8    7   HAZARDS

?>E HAZARDS
 REF    INDEX-TERM              TYPE ITEMS RT
E 1    HARTREE                 -------     2
E 2    HARTREE-FOCK APPROXI----------     2
E 3    HAWK                    -------     1
E 4    HAZARDOUS               -------     2
E 5    HAZARDOUS MATERIALS     -------     2
E 6 -  HAZARDS                 -------     7
E 7    HE3                     -------     1
E 8    HEAD                    -------     2
E 9    HEAD(ANATOMY)           -------     1
E10    HEALING                 -------     1
E11    HEALTH                  -------     3
E12    HEALTH PHYSICS          -------     1
E13    HEARING                 -------     1
E14    HEART                   -------     3
E15    HEART VOLUME            -------     1
E16    HEAT                    -------    10
```

```
                                        -MORE-
?>SE4
            9     2   HAZARDOUS

?>SE5
           10     2   HAZARDOUS MATERIALS

?>SE7
           11     1   HE3

?>C9+10
           12     2    9+10
?>C120R8
           13     7    120R8
?>C7 AND 13
           14     1    7 AND 13
?>T14
14/2/ 1


RADIATION HAZARDS.
ADVISORY GROUP FOR AEROSPACE RESEARCH AND DEVELOPMENT PARIS (FRANCE)
 (400043)
C535315    FLD: 6R, 57V   GRAI7524
AUG 75   155P
REPT NO: AGARD-LS-78MONITOR: 18    DESCRIPTORS: *RADIATION HAZARDS, *R
ADIOBIOLOGY, RADIATION EFFECTS, ELECTROMAGNETIC RADIATION, MICROWAVES,
 ULTRASONIC RADIATION, BIOPHYSICS, CARDIAC PACEMAKERS, HEALTH PHYSICS,
 PHYSICAL PROPERTIES, NATO    IDENTIFIERS: MICROWAVE RADIOBIOLOGY, NTI
SDODSD
AD-A015 200/9ST   NTIS PRICES: PC$6.25/MF$2.25
?>PR 14/5/1
PR 14/5/1
?>LOGOFF
28-MAR-79  11:15:06 USER DEC
 $0.00      .030 HOURS IN FILE 1
LOGOFF @  11:15:06




-----   END OF EMULATION OF DIALOG     -----

TYPE CAL TO RETURN TO THE CATALYST CAL MODULES;
TYPE K/F TO LOGOFF THE SYSTEM; OR
TYPE EXIT TO RETURN TO THE SYSTEM MONITOR:

.>EXIT
```

114

```
End of execution    FORDTS 5B(772)
CPU time: 2.89  Elapsed time: 6:58.22
EXIT

.K/F
Job 25 [134057,120121] off TTY12  at 1115 28-Mar-79  Connect=24 Min
Disk R+W=514+103  Tape IO=0  Saved all files (2364 blocks)
CPU 0:11  Core HWM=23P  Units=0.0760 ($5.70)
```

115

```
.
PITT DEC-1099/B 603.88 15:35:59 TTY240 SYSTEM 1237/1240
SE LOGIN OR ATTACH

.TTY SY A

PITT DEC-1099/A 603.89 15:36:05 TTY240 SYSTEM 1217/1239
SE LOGIN OR ATTACH

.LOG 134057/120121
JOB 45 PITT DEC-1099/A 603.89 TTY240  WED 28-MAR-79 1536
WORD:
LAST LOGIN: 28-MAR-79 1253
ITS REMAINING: 59.3   UNITS USED: 14.1

.TTY FI 2

.R CTLYST


CATALYST/II

28 MAR 1979      15 36 36.4

LESSON.SECTION[P,PN]:TRAINER[134057,120121]
ARE YOU CARUSO     ? ( TYPE YES OR NO) >/T
DO YOU WANT TO SEE ANY MAIL? >Y




STI SERVICES TRAINER
====================

COMPUTER ASSISTED LEARNING AND PRACTICE MODULES



TYPE IN THE NUMBER OF THE MODULE (1 THRU 7), OR
THE LETTER OF THE EMULATOR (A OR B), OR
L TO SEE THE LIST OF MODULES AND EMULATORS, OR
E FOR AN EXPLANATION:
```

>4

MODULE 4 -- DATABASE FEATURES
==========

Database and file descriptions provided by the search services are necessary in preparing an online search. Have the DIALOG Brief Guide or ORBIT Quick Reference Guide IN HAND whenever you search online. This module compares DIALOG and ORBIT practices. You will need your Training Manual for this module (pp. 22-23).

If you have your training manual with you, type GO; if not, type EXIT and get it before you continue this module.

>GO

Look at the description of the NTIS file in ORBIT's Quick Reference Guide or see Trainer Manual p. 22.
On ORBIT in NTIS what could you enter to retrieve the author Landolt?

SS 4/C?
USER:
>

LANDOLT

+ Just enter LANDOLT/AU +

SS 4/C?
USER:
>LANDOLT/AU
Right on!

Turn to Table 1, p. 22, of your Manual.
Notice where the ORBIT searchable fields on the two files, ERIC and NTIS, are similar and different. For example, on both files, "Author" is specified by the /AU field descriptor, so you could type in JONES/AU on either file.

On ORBIT in ERIC, what would you type in to see the postings for the word FAITOUR which is found in a document abstract?

SS 1/C?
USER:

>

HELP
+ JUST TYPE FAITOUR +
+ SINCE THE TABLE SHOWS THAT SUBJECT TERMS CONTAINED IN THE +
+ ABSTRACTS ARE INCLUDED IN THE BASIC INDEX YOU DON'T HAVE +
+ TO QUALIFY THE TERM. +

SS 1/C?
USER:
>FAITOUR
RIGHT ON,!

NOW LOOK AT TABLE 2 WHICH SHOWS THE DIALOG CONVENTIONS FOR ERIC AND NTIS. NOTICE THAT THE CODES FOR NTIS AND ERIC DIFFER JUST AS WITH ORBIT AND, FURTHER, THAT THERE ARE TWO TYPES OF CODES, PREFIX AND SUFFIX.

IN DIALOG IS "AUTHOR" A PREFIX OR A SUFFIX CODE?

>YES

+ IN DIALOG, "=" INDICATES A PREFIX CODE WHILE "/" +
+ INDICATES A SUFFIX CODE. +
IN DIALOG IS "AUTHOR" A PREFIX OR A SUFFIX CODE?

>PREFIX
GOOD,!

HOW WOULD YOU EXPAND JONES AS AN AUTHOR IN DIALOG?

?>E JONES/AU

+ NO. /AU IS PROPER FOR ORBIT, BUT NOT FOR DIALOG. +

+ REMEMBER, IN DIALOG, AUTHOR IS A PREFIX CODE. TRY +
+ E AU=JONES +

?>

EAU=JONES
YOU'RE DOING FINE,!

Now a different question. Suppose you had only a word from the title of a document for which you need the full citation and are able to search either ORBIT or DIALOG. Which data base, ORBIT's or DIALOG's, would you use to search the NTIS file?

>

EITHER

+ Try DIALOG, because in ORBIT you must search the full BASIC INDEX to find your title word. This could result in expensively broadening your search, resulting in more output and cost than necessary. +

+ This last question is much more important than it might seem. Remember, whenever you have two or more files and/or two or more search services (data bases) available which could provide you with the answers you need, you must always consider which is most appropriate. Here are some questions to help decide: +
+ 1. Can you restrict your search to the most specific useful field; or conversely, +
+ 2. can you search all possibly useful fields with one command; and additionally, +
+ 3. can you get a quick condensed summary of the fields in which a search term occurs (with no. of items posted to each); and, +
+ 4. can you select from those options without typing all chosen items? +

The systems represented on this training package are:
SCORPIO (not yet available in this module),
DIALOG,
AND ORBIT.

Choose one of these systems now, so that you can learn a little more about how various database features are represented on that system. Once you have learned this material about one system, you may either look at similar information about another system by typing the system name, or end by typing DONE.

Type a system name or DONE.
>

DIALOG

----- DIALOG Practice -----

On most files, the DIALOG system allows searching on a number of prefix codes (AU= for personal author, DT= for document type, and so on) and on a number of suffix codes (/AB for abstract, /TI for title, and so on).

If you will look at the ERIC-DIALOG file information in your training manual, you will see a number of prefix fields that are searchable. If, for example, we wanted to retrieve only articles from INSTRUCTOR MAGAZINE, we would use the Journal Name prefix.

? S JO=INSTRUCTOR

Now suppose that you wanted to retrieve from the ERIC file only those items authored by WALTER JONES.

?>.FILE 1

+ The optimum entry would probably be S AU=JONES, W? +
+ Notice that instead of using WALTER or just W for the +
+ first name, we used W?. The ? is the truncation symbol +
+ for DIALOG. We will discuss its meaning and use more +
+ in Module 5. The reason that we use it here is that we +
+ do not know in exactly what form the author's name has +
+ been stored. It could be JONES, WALTER; JONES, W.; or +
+ some other unknown form. The use of the ? (truncation +
+ symbol) after the initial W insures that all forms of +
+ the name will be retrieved, as long as they begin +
+ with JONES, W. This assures us that we won't miss any +
+ indexed items by the author. +

?>S AU=JONES. W?

+ Try S AU=JONES, W? +

+ Perhaps you need more review of the Module 4 material in +
+ your manual. If you want to take a quick review now, do so +
+ and type GO when ready to continue. If you wish to do an +
+ extensive review, type EXIT and try again later. +

>GO

Now suppose that you wanted to retrieve from the ERIC file only those items authored by WALTER JONES.

?>S AU=JONES, W?
Right,!

Suppose that you wanted to conduct a search on the YEAR field on the NTIS-DIALOG database. Could you conduct such a direct search? (Answer YES or NO.)

>NO
Right on,!

+ CHOOSING SINGLE OR MULTIWORD SEARCH TERMS +

ANY DIALOG FIELD CAN BE SEARCHED USING ONE-WORD SEARCH TERMS. FOR EXAMPLE, IF WE WANTED TO SEARCH THE TITLE FIELD WITH THE TERM PHYSICS:

?S PHYSICS/TI

THERE ARE TWO POSSIBILITIES WHEN SEARCHING WITH MULTIWORD SEARCH TERMS, HOWEVER.

AS AN EXAMPLE OF WHAT IS INVOLVED, THE SUBJECTS SUN POWER, SOLAR POWER, AND SOLAR HEATING MIGHT ALL BE INDEXED BY THE DESCRIPTOR SOLAR ENERGY. TO RETRIEVE ANY OF THESE ITEMS BY A SEARCH ON THE DESCRIPTOR FIELD, THE TERM SOLAR ENERGY MUST BE USED. TRY IT.

S SOLAR ENERGY
RIGHT ON!

USE OF THE WORD PROXIMITY REQUIREMENT: (W)

IF YOU WANT TO SEARCH ON A MULTIWORD TERM, SUCH AS SOLAR ENERGY, IN A FIELD WHICH USES ONLY SINGLE WORD INDEX ENTRIES, SUCH AS THE TITLE FIELD, USE THE CONNECTOR (W).

THE (W) PROXIMITY INDICATOR INDICATES THAT THE TWO WORDS ON EITHER SIDE OF IT MUST BE ADJACENT AND IN THE SAME ORDER IN WHICH THEY ARE INPUT FOR A MATCH TO OCCUR. FOR EXAMPLE, IF YOU WANTED TO SEARCH THE IDENTIFIER FIELD WITH THE TERM ELEMENTARY CLASSROOM TEACHING, YOU WOULD TYPE:

?S ELEMENTARY(W)CLASSROOM(W)TEACHING/ID

TRY USING THE TERM LUNAR ECLIPSE AS A SEARCH TERM ON THE TITLE FIELD OF THE NTIS-DIALOG DATABASE.

?>HELP

+ S LUNAR(W)ECLIPSE/TI IS THE CORRECT SEARCH +
+ TERM BECAUSE THE PROXIMITY INDICATOR (W) MUST BE USED +
+ SINCE WE ARE SEARCHING WITH A MULTIWORD TERM ON A +
+ SUFFIX FIELD OTHER THAN DESCRIPTOR. THE /TI IS USED +
+ TO INDICATE THAT WE WANT TO SEARCH THE TITLE FIELD +
+ ONLY. IF WE HAD NOT SPECIFIED THE SUFFIX /TI, THE +
+ SYSTEM WOULD HAVE DEFAULTED TO A SEARCH OF ALL THE +
+ SUFFIX FIELDS (/CS, /DE, /ID, AND /TI), AND WE +
+ MIGHT HAVE RETRIEVED ITEMS THAT WE DID NOT WANT. +

?>S LUNAR(W)ECLIPSE

+ TRY S LUNAR(W)ECLIPSE/TI +

121

?>S LUNAR(W)ECLIPSE/TI
RIGHT,!

```
     NOW SUPPOSE THAT YOU WANTED TO SEARCH ON THE DESCRIPTOR FIELD OF
THE ERIC-DIALOG FILE WITH THE TERM CONDITIONED LEARNING. COULD YOU
SEARCH THIS FIELD?
     (ANSWER YES OR NO.)

>YES
RIGHT!
     TRY SELECTING CONDITIONED LEARNING  AS A SEARCH
TERM ON THE DESCRIPTOR FIELD.


?>S CONDITIONED LEARNING/DE
+      S CONDITIONED LEARNING IS THE OPTIMUM ANSWER                    +
+       BECAUSE SINCE WE ARE SEARCHING THE DESCRIPTOR                  +
+       FIELD WE NEED NO PROXIMITY INDICATORS OR LOGICAL               +
+       OPERATORS, AND SINCE WE ARE USING A MULTIWORD SEARCH           +
+       TERM WITH NO PROXIMITY INDICATORS OR LOGICAL OPERATORS, THE    +
+       SEARCH WILL DEFAULT TO THE DESCRIPTOR FIELD AUTOMATICALLY.     +
        TRY THAT AGAIN.


?>S CONDITIONED LEARNING
EXCELLENT!


 ----- END OF DIALOG PRACTICE -----

YOU CAN NOW LOOK AT FEATURES OF OTHER SEARCH SYSTEMS, OR TYPE EXIT TO
GET A CHOICE OF OTHER MODULES. A PRACTICE SESSION ON MODULE A, THE
DIALOG EMULATOR IS SUGGESTED. (SEE TRAINER MANUAL, P.45)

   TYPE A SYSTEM NAME OR DONE.
```

>DIALOG

----- DIALOG Practice -----

On most files, the DIALOG system allows searching on a number of prefix codes (AU= for personal author, DT= for document type, and so on) and on a number of suffix codes (/AB for abstract, /TI for title, and so on).

If you will look at the ERIC-DIALOG file information in your training manual, you will see a number of prefix fields that are searchable. If, for example, we wanted to retrieve only articles from INSTRUCTOR MAGAZINE, we would use the Journal Name prefix.

? S JO=INSTRUCTOR

Now suppose that you wanted to retrieve from the ERIC file only those items authored by WALTER JONES.

?>S AU=JONES, W?
You're doing fine,!

Suppose that you wanted to conduct a search on the YEAR field on the NTIS-DIALOG database. Could you conduct such a direct search?
(Answer YES or NO.)

>NO
You're doing fine,!

+ Choosing single or multiword search terms +

Any DIALOG field can be searched using one-word search terms. For example, if we wanted to search the Title field with the term PHYSICS:

?S PHYSICS/TI

There are two possibilities when searching with multiword search terms, however.

As an example of what is included, the subjects sun power, solar power, and solar heating might all be indexed by the Descriptor SOLAR ENERGY. To retrieve any of these items by a search on the Descriptor field, the term SOLAR ENERGY must be used. Try it.

?>S SOLAR ENERGY
Good!

USE OF THE WORD PROXIMITY REQUIREMENT: (W)

IF YOU WANT TO SEARCH ON A MULTIWORD TERM, SUCH AS SOLAR ENERGY, IN A FIELD WHICH USES ONLY SINGLE WORD INDEX ENTRIES, SUCH AS THE TITLE FIELD, USE THE CONNECTOR (W).

THE (W) PROXIMITY INDICATOR INDICATES THAT THE TWO WORDS ON EITHER SIDE OF IT MUST BE ADJACENT AND IN THE SAME ORDER IN WHICH THEY ARE INPUT FOR A MATCH TO OCCUR. FOR EXAMPLE, IF YOU WANTED TO SEARCH THE IDENTIFIER FIELD WITH THE TERM ELEMENTARY CLASSROOM TEACHING, YOU WOULD TYPE:

?S ELEMENTARY(W)CLASSROOM(W)TEACHING/ID

TRY USING THE TERM LUNAR ECLIPSE AS A SEARCH TERM ON THE TITLE FIELD OF THE NTIS-DIALOG DATABASE.

?>S LUNAR(W)ECLIPSE/TI
GOOD SHOW THERE,!

NOW SUPPOSE THAT YOU WANTED TO SEARCH ON THE DESCRIPTOR FIELD OF THE ERIC-DIALOG FILE WITH THE TERM CONDITIONED LEARNING. COULD YOU SEARCH THIS FIELD?
(ANSWER YES OR NO.)

>YES
GOOD SHOW THERE!
TRY SELECTING CONDITIONED LEARNING AS A SEARCH TERM ON THE DESCRIPTOR FIELD.

?>S CONDITIONED LEARNING
GOOD SHOW THERE,!

----- END OF DIALOG PRACTICE -----

YOU CAN NOW LOOK AT FEATURES OF OTHER SEARCH SYSTEMS, OR TYPE EXIT TO GET A CHOICE OF OTHER MODULES. A PRACTICE SESSION ON MODULE A, THE DIALOG EMULATOR IS SUGGESTED. (SEE TRAINER MANUAL, P.45)

TYPE A SYSTEM NAME OR DONE.
>EXIT

TYPE ONE OF THE FOLLOWING:
MODULE NUMBER
EMULATOR LETTER
L TO SEE THE LIST OF MODULES AND EMULATORS
EXIT TO RETURN TO THE SYSTEM MONITOR (AND LOGOFF USING K/F)
>A

```
ENTER YOUR DIALOG PASSWORD>DEC
   . (   . LOGON FILE 1 15:53:52


?>FI↑U
BEGIN↑U
SBASELINE/TI
             1     0    BASELINE/TI

?>SRATS/TI
             2     2    RATS/TI

?>S IONIZING(W)RADIATION/TI
             3     0    IONIZING(W)RADIATION

?>S IONIZING/TI
             4     2    IONIZING/TI

?>A↑U
S RADIATION/TI
             5     5    RADIATION/TI

?>C2 AND 4 AND 5
SET HAS NO MEMBERS
?>C 2 AND 4
SET HAS NO MEMBERS
?>C2 AND 5
SET HAS NO MEMBERS
?>C 4 OR 5
             6     6     4 OR 5
?>C2 AND 6
SET HAS NO MEMBERS
?>S NONIONIZING
             7     1    NONIONIZING

?>C7 1\1\AND 5
             8     1     7 AND 5
?>C8 AND 2
SET HAS NO MEMBERS
?>T
    T
    INVALID COMMAND CONTINUATION
?>T8
 8/2/ 1


EFFECTS OF LOW-LEVEL MICROWAVE RADIATION ON BEHAVIORAL BASELINES.
NAVAL MEDICAL RESEARCH INST BETHESDA MD◆BUREAU OF MEDICINE AND SURGERY
, WASHINGTON, D.C.   (249650)
MEDICAL RESEARCH PROGRESS REPT.
AUTHOR: THOMAS, JOHN R.; FINCH, EDWARD D.; FULK, DAVID W.; BURCH, LIND
A S.
C535546     FLD: 6R, 57V    GRAI7524
1975   11P
PROJECT: MF51-524   TASK: MF51-524-015  MONITOR: 18     AVAILABILITY: P
UB. IN ANNALS OF THE NEW YORK ACADEMY OF SCIENCES, V247 P425-432, 28 F
EB 75.     DESCRIPTORS: ◆RADIATION EFFECTS, BEHAVIOR, MICROWAVES, EXPOS
URE(PHYSIOLOGY), NERVOUS SYSTEM, RATS, EASTERN EUROPE, USSR, STANDARDS
, DOSE RATE, LOW LEVEL, CONDITIONED RESPONSE, MODIFICATION, X BAND, S
BAND, REPRINTS IDENTIFIERS: NONIONIZING RADIATION, NTISDODXR, NTISDODN
?>
```

```
S NONIONIZING
             9     1    NONIONIZING

?>S RATS
            10     8    RATS

?>SBEHAVIOR
            11     9    BEHAVIOR

?>C9*10*11
            12     1     9*10*11
?>T9/2
 9/2/ 1


EFFECTS OF LOW-LEVEL MICROWAVE RADIATION ON BEHAVIORAL BASELINES.
NAVAL MEDICAL RESEARCH INST BETHESDA MD*BUREAU OF MEDICINE AND SURGERY
, WASHINGTON, D.C.   (249650)
MEDICAL RESEARCH PROGRESS REPT.
AUTHOR: THOMAS, JOHN R.; FINCH, EDWARD D.; FULK, DAVID W.; BURCH, LIND
A S.
C535546    FLD: 6R, 57V   GRAI7524
1975   11P
PROJECT: MF51-524   TASK: MF51-524-015  MONITOR: 18    AVAILABILITY: P
UB. IN ANNALS OF THE NEW YORK ACADEMY OF SCIENCES, V247 P425-432, 28 F
EB 75.    DESCRIPTORS: *RADIATION EFFECTS, BEHAVIOR, MICROWAVES, EXPOS
URE(PHYSIOLOGY), NERVOUS SYSTEM, RATS, EASTERN EUROPE, USSR, STANDARDS
, DOSE RATE, LOW LEVEL, CONDITIONED RESPONSE, MODIFICATION, X BAND, S
BAND, REPRINTS IDENTIFIERS: NONIONIZING RADIATION, NTISDODXR, NTISDODN
?>LOGOFF
          15:59:20 USER DEC
 $0.00      .008 HOURS IN FILE 1
LOGOFF @  15:59:20




-----   END OF EMULATION OF DIALOG     -----

TYPE CAL TO RETURN TO THE CATALYST CAL MODULES;
TYPE K/F TO LOGOFF THE SYSTEM; OR
TYPE EXIT TO RETURN TO THE SYSTEM MONITOR:


.>K/F
% QUENFI NO FILES IN REQUEST
JOB 45 [134057,120121] OFF TTY240 AT 1559 28-MAR-79  CONNECT=24 MIN
DISK R+W=749+104  TAPE IO=0  SAVED ALL FILES (2388 BLOCKS)
CPU 0:11  CORE HWM=23P  UNITS=0.0784 ($5.88)
```

TYPE IN THE NUMBER OF THE MODULE (1 THRU 7), OR
THE LETTER OF THE EMULATOR (A OR B), OR
L TO SEE THE LIST OF MODULES AND EMULATORS, OR
E FOR AN EXPLANATION:

>

5

MODULE 5 -- NEGOTIATING SEARCH TERMS
==========

THE PROCESS OF EXPRESSING YOUR QUERY AS A LIST OR COMBINATION OF SPECIFIC WORDS OR "SEARCH TERMS" IS NOT EASY. NOT ONLY MUST YOUR CHOICE OF TERMS EXPRESS YOUR INFORMATION NEED COMPLETELY IN A SEMANTIC, CONCEPTUAL SENSE, BUT IT MUST ALSO MATCH, MECHANICALLY, LETTER FOR LETTER, THE WORDS STORED BY THE RETRIEVAL SYSTEM TO REPRESENT THE DOCUMENTS YOU NEED.

BELOW ARE THE COMMANDS THAT ALLOW BROWSING, TERM SELECTION, AND DISCOVERY OF CORRECT FORMS. THEY ARE LISTED FOR EACH SYSTEM REPRESENTED ON THIS TRAINING PACKAGE.

SYSTEM	COMMANDS
DIALOG	EXPAND OR E
	SELECT OR S
ORBIT	NEIGHBOR OR NBR
	(SS) OR FIND
SCORPIO	BRWS
	SLCT

TRY USING THESE COMMANDS AS IF YOU WERE SEARCHING THE ERIC DATABASE.

TYPE A SYSTEM NAME OR TYPE DONE.
>DIALOG

----- DIALOG PRACTICE -----

BEGIN BY USING EXPAND WITH THE TERM DISADVANTAGED.

?>HELP

\+ YOU SHOULD ENTER E OR EXPAND, FOLLOWED BY DISADVANTAGED. +

?>EDISADVANTAGED

REF	INDEX-TERM	TYPE	ITEMS	RT
E1	DISAD----------		2	
E2	DISADV----------		2	
E3	DISADVANTADED----------		1	
E4	DISADVANTAGE----------		162	
E5	DISADVANTAGE ENVIRONMENT-----		1	
E6	-DISADVANTAGED----------		10888	1
E7	DISADVANTAGED ADULTS---------		1	
E8	DISADVANTAGED CHILDREN-------			1
E9	DISADVANTAGED ENVIRONMENT----------		213	10
E10	DISADVANTAGED ENVIRONMENT COGNITIVE DEVELO---------		1	
E11	DISADVANTAGED GROUPS---------		1395	9
E12	DISADVANTAGED SCHOOLS--------		83	1
E13	DISADVANTAGED STUDENTS-------			1
E14	DISADVANTAGED YOUTH----------		5142	11
E15	DISADVANTAGEDNESS----------		4	
E16	DISADVANTAGEGEGE----------		1	
E17	DISADVANTAGEMENT----------		1683	1
E18	DISADVANTAGEMENTS----------		1	

-MORE-

NOTE THAT YOUR EXPANDED TERM IS E6, AND IS SPECIALLY MARKED. THE WORD "MORE" AT THE BOTTOM OF THE ITEMS COLUMN INDICATES THAT THERE ARE ADDITIONAL ALPHABETICALLY RELATED TERMS IN THE EXPAND LISTING (DIALOG WILL ONLY LIST 20 LINES AT A TIME IN AN EXPAND LISTING). TO SEE MORE LISTINGS, YOU SHOULD ENTER PAGE OR P. TRY IT.

?>

128

```
PAGE
REF    INDEX-TERM                    TYPE  ITEMS  RT
E19    DISADVANTAGEOUS--------------        7
E20    DISADVANTAGES----------------      684
E21    DISADVANTANTAGED-------------        1
E22    DISADVANTATED----------------        1
E23    DISADVANTED------------------        1
E24    DISADVANTEGEMENT-------------        1
E25    DISADVATEGED-----------------        1
E26    DISAFFECTED------------------       16
E27    DISAFFECTION-----------------       18
E28    DISAFFECTIONS----------------        2
E29    DISAFFILIATED----------------        1
```

LOOKING AT THE EXPAND LISTING, WE CAN SEE THAT THERE ARE 10888 ITEMS INDEXED BY THE TERM DISADVANTAGED. WE ARE ALSO PRESENTED WITH MANY OTHER RELATED TERMS FROM WHICH WE CAN DISCOVER TERMS TO USE AS SEARCH TERMS. TO SEE THESE RELATED TERMS, WE MUST EXPAND THE E NUMBER FOR THAT TERM. TRY EXPANDING THE RELATED TERMS FOR DISADVANTAGED YOUTH.

```
?>HELP

+   TO SEE THE RELATED TERMS YOU SHOULD ENTER E E14 OR EXPAND E14.   +
?>
```

```
E14

+   TO SEE THE RELATED TERMS YOU SHOULD ENTER E E14 OR EXPAND E14.   +
?>E E14
REF    INDEX-TERM                    TYPE  ITEMS  RT
R1    -DISADVANTAGED YOUTH----------        5142  11
R2     CULTURALLY DEPRIVED
        CHILDREN--------------------U           1
R3     DEPRIVED CHILDREN------------U           1
R4     DISADVANTAGED CHILDREN-------U           1
R5     DISADVANTAGED STUDENTS-------U           1
R6     INNER CITY CHILDREN----------U           1
R7     SLUM CHILDREN----------------U           1
R8     DISADVANTAGED GROUPS---------B    1395   9
R9     YOUTH------------------------B   10599  22
R10    CHILD DEVELOPMENT
         CENTERS--------------------R     116   6
R11    CULTURALLY DISADVANTAGED-----R    1659  11
R12    STUDY CENTERS----------------R      82  10
```

THE LETTERS UNDER THE TYPE COLUMN INDICATE HOW A TERM IS RELATED TO YOUR TERM (DISADVANTAGED YOUTH). U INDICATES THAT THE TERM IS NOT AN ACCEPTABLE ERIC INDEX TERM. THE USER SHOULD SELECT THE SYNONYM (R1). B INDICATES THE ACCEPTABLE TERM IS BROADER THAN YOUR TERM (I.E., DISADVANTAGED YOUTH ARE ONLY ONE OF SEVERAL DISADVANTAGED GROUPS.) R INDICATES THAT THE TERM IS A RELATED SUBJECT (I.E., DISADVANTAGED YOUTH MIGHT BE CLIENTS OF CHILD DEVELOPMENT CENTERS.) ANY ONE OF THE RELATED OR BROADER TERMS MIGHT BE USEFUL TO YOU AS A SEARCH TERM.

BEFORE WE GO ON... A WORD ABOUT INTERRUPTING ONLINE OUTPUT. EVERY SYSTEM PERMITS YOU TO STOP PRINTING MATERIAL THAT IS NOT INTERESTING YOU. ON TRAINER IT IS (CONTROL KEY) O (↑O). IF YOU ARE ON DIALOG OR ORBIT, IT IS THE (BREAK) KEY.

TRY USING ↑O DURING THE FOLLOWING OUTPUT. (IT WILL ALSO BE NECESSARY TO HIT THE CARRIAGE RETURN TO RESUME THIS LESSON.)

```
REF    INDEX-TERM                    TYPE  ITEMS  RT
R1    -DISADVANTAGED YOUTH----------        5142  11
R2     CULTURALLY DEPRIVED
        CHILDREN--------------------U           1
R3     DEPRIVED CHILDREN------------U↑O
```

THE SELECT COMMAND, YOU MAY RECALL, CAN BE USED WITH E NUMBERS, R NUMBERS, OR ACTUAL TERMS (E.G., S DISADVANTAGED).

TRY SELECTING THE TERM DISADVANTAGED YOUTH.

?>

HELP

\+ YOU COULD ENTER S E14, S R1, OR S DISADVANTAGED YOUTH. +

```
?>S R1
          1    5142      DISADVANTAGED YOUTH
```

GOOD, YOU HAVE CREATED SET 1 WITH 5142 ITEMS INDEXED BY THE TERM DISADVANTAGED YOUTH.

STEM SEARCHING AND CHARACTER SUBSTITUTION

INSTEAD OF USING THE EXPAND COMMAND, WHICH CAN BE SLOW AND COSTLY, YOU CAN SEARCH ON WORD STEMS, USING A QUESTION MARK TO STAND FOR ANY CONTINUATION OF A TERM.

SDISAD? WOULD RETRIEVE FOR ALL TERMS E1-E25 IN THE ABOVE LIST.

TRY USING A TRUNCATED FORM TO SELECT GALAXY OR GALAXIES
BUT NOT GALACTIC OR GALANTINE.

?>

HELP

\+ TRY SGALAX? +

?>

SGALAX?
RIGHT ON:!

IF YOU ARE NOT SURE OF INTERNAL SPELLING YOU CAN SUBSTITUTE A ? FOR EACH QUESTIONABLE CHARACTER. TRY SELECTING WOMAN OR WOMEN.

?>

WOMAN

\+ THE ANSWER IS SWOM?N +

```
Try for HYDROCHLORIDE or HYDROFLUORIDE.

?>HYDRO \ \?????IDE

+      Try SHYDRO???ORIDE                                              +

?>AHYSEO???ORIDE

+      Try SHYDRO???ORIDE                                              +

?>SHYDRO???ORIDE
Good,!

     If you want to specify a limited length for a word ending,
use the number of question marks which corresponds to the longest
acceptable form, skip a space and enter a final question mark.

Try truncating to get just THEATER or THEATRE, or plurals THEATERS
or THEATRES, but not THEATRICAL AGENTS and other longer forms.
?>THEAT???

+      Use STHEAT??? ?                                                 +

?>STHEAT///

+      Use STHEAT??? ?                                                 +

?>STHEAT??? ?
Correct,!


     Type a system name or type DONE.
>ORBIT
```

----- DIALOG PRACTICE -----

BEGIN BY USING EXPAND WITH THE TERM DISADVANTAGED.

```
?>EDISADVANTAGED
Ref    Index-term                      Type  Items  RT
E1     DISAD-------------------------          2
E2     DISADV------------------------          2
E3     DISADVANTADED-----------------          1
E4     DISADVANTAGE------------------        162
E5     DISADVANTAGE ENVIRONMENT------          1
E6    -DISADVANTAGED-----------------      10888   1
E7     DISADVANTAGED ADULTS----------          1
E8     DISADVANTAGED CHILDREN--------                1
E9     DISADVANTAGED
         ENVIRONMENT-----------------        213  10
E10    DISADVANTAGED ENVIRONMENT
           COGNITIVE DEVELO---------          1
E11    DISADVANTAGED GROUPS----------       1395   9
E12    DISADVANTAGED SCHOOLS---------         83   1
E13    DISADVANTAGED STUDENTS--------                1
E14    DISADVANTAGED YOUTH-----------       5142  11
E15    DISADVANTAGEDNESS-------------          4
E16    DISADVANTAGEGEGE--------------          1
E17    DISADVANTAGEMENT--------------       1683   1
E18    DISADVANTAGEMENTS-------------          1
                                          -MORE-
```

NOTE THAT YOUR EXPANDED TERM IS E6, AND IS SPECIALLY MARKED. THE WORD "MORE" AT THE BOTTOM OF THE ITEMS COLUMN INDICATES THAT THERE ARE ADDITIONAL ALPHABETICALLY RELATED TERMS IN THE EXPAND LISTING (DIALOG WILL ONLY LIST 20 LINES AT A TIME IN AN EXPAND LISTING). TO SEE MORE LISTINGS, YOU SHOULD ENTER PAGE OR P. TRY IT.

```
?>P
Ref    Index-term                      Type  Items  RT
E19    DISADVANTAGEOUS---------------          7
E20    DISADVANTAGES-----------------        684
E21    DISADVANTANTAGED--------------          1
E22    DISADVANTATED-----------------          1
E23    DISADVANTED-------------------          1
E24    DISADVANTEGEMENT--------------          1
E25    DISADVATEGED------------------          1
E26    DISAFFECTED-------------------         16
E27    DISAFFECTION------------------         18
E28    DISAFFECTIONS-----------------          2
E29    DISAFFILIATED-----------------          1
```

LOOKING AT THE EXPAND LISTING, WE CAN SEE THAT THERE ARE 10888 ITEMS INDEXED BY THE TERM DISADVANTAGED. WE ARE ALSO PRESENTED WITH MANY OTHER RELATED TERMS FROM WHICH WE CAN DISCOVER TERMS TO USE AS SEARCH TERMS. TO SEE THESE RELATED TERMS, WE MUST EXPAND THE E NUMBER FOR THAT TERM. TRY EXPANDING THE RELATED TERMS FOR DISADVANTAGED YOUTH.

?>EE14

REF	INDEX-TERM	TYPE	ITEMS	RT
R1	-DISADVANTAGED YOUTH----------		5142	11
R2	CULTURALLY DEPRIVED CHILDREN----------	U		1
R3	DEPRIVED CHILDREN----------	U		1
R4	DISADVANTAGED CHILDREN-------	U		1
R5	DISADVANTAGED STUDENTS-------	U		1
R6	INNER CITY CHILDREN----------	U		1
R7	SLUM CHILDREN----------	U		1
R8	DISADVANTAGED GROUPS---------	B	1395	9
R9	YOUTH----------	B	10599	22
R10	CHILD DEVELOPMENT CENTERS----------	R	116	6
R11	CULTURALLY DISADVANTAGED-----	R	1659	11
R12	STUDY CENTERS----------	R	82	10

THE LETTERS UNDER THE TYPE COLUMN INDICATE HOW A TERM IS RELATED TO YOUR TERM (DISADVANTAGED YOUTH). U INDICATES THAT THE TERM IS NOT AN ACCEPTABLE ERIC INDEX TERM. THE USER SHOULD SELECT THE SYNONYM (R1). B INDICATES THE ACCEPTABLE TERM IS BROADER THAN YOUR TERM (I.E., DISADVANTAGED YOUTH ARE ONLY ONE OF SEVERAL DISADVANTAGED GROUPS.) R INDICATES THAT THE TERM IS A RELATED SUBJECT (I.E., DISADVANTAGED YOUTH MIGHT BE CLIENTS OF CHILD DEVELOPMENT CENTERS.) ANY ONE OF THE RELATED OR BROADER TERMS MIGHT BE USEFUL TO YOU AS A SEARCH TERM.

BEFORE WE GO ON... A WORD ABOUT INTERRUPTING ONLINE OUTPUT. EVERY SYSTEM PERMITS YOU TO STOP PRINTING MATERIAL THAT IS NOT INTERESTING YOU. ON TRAINER IT IS <CONTROL KEY> O (↑O). IF YOU ARE ON DIALOG OR ORBIT, IT IS THE <BREAK> KEY.

TRY USING ↑O DURING THE FOLLOWING OUTPUT. (IT WILL ALSO BE NECESSARY TO HIT THE CARRIAGE RETURN TO RESUME THIS LESSON.)

```
+   ENTER PAGE OR P TO SEE THE ADDITIONAL LISTINGS.                    +
?>PAGE
REF    INDEX-TERM                    TYPE   ITEMS  RT
E19    DISADVANTAGEOUS-------------          7
E20    DISADVANTAGES---------------        684
E21    DISADVANTANTAGED------------          1
E22    DISADVANTATED------↑D

+   TO SEE THE RELATED TERMS YOU SHOULD ENTER E E14 OR EXPAND E14.     +
?>E1↑U
EXPAND E14
REF    INDEX-TERM                    TYPE   ITEMS  RT
R1    -DISADVANTAGED YOUTH----------       5142  11
R2     CULTURALLY DEPRIVED
        CHILDREN--------------------U          1
R3     DEPRIVED CHILDREN-----------U          1
R4     DISADVANTAGED CHILDREN-↑D
```

THE SELECT COMMAND, YOU MAY RECALL, CAN BE USED WITH E NUMBERS, R NUMBERS, OR ACTUAL TERMS (E.G., S DISADVANTAGED).
TRY SELECTING THE TERM DISADVANTAGED YOUTH.

```
?>S R1
         1    5142      DISADVANTAGED YOUTH
```

GOOD, YOU HAVE CREATED SET 1 WITH 5142 ITEMS INDEXED BY THE TERM DISADVANTAGED YOUTH.

STEM SEARCHING AND CHARACTER SUBSTITUTION

STEM SEARCHING AND CHARACTER SUBSTITUTION

Instead of using the EXPAND command, which can be slow and costly, you can search on word stems, using a question mark to stand for any continuation of a term.

SDISAD? would retrieve for all terms E1-E25 in the above list.

Try using a truncated form to select GALAXY or GALAXIES but not GALACTIC or GALANTINE.

?>S GALA?

\+ Try SGALAX? +

?>S GALAX?
Right,!

If you are not sure of internal spelling you can substitute a ? for EACH questionable character. Try selecting WOMAN or WOMEN.

?>WOM?N

\+ The answer is SWOM?N +

Try for HYDROCHLORIDE or HYDROFLUORIDE.

?>S HYDRO???ORIDE
Excellent,!

If you want to specify a limited length for a word ending, use the number of question marks which corresponds to the longest acceptable form, skip a space and enter a final question mark.

Try truncating to get just THEATER or THEATRE, or plurals THEATERS or THEATRES, but not THEATRICAL AGENTS and other longer forms.
?>S THEATR???

\+ Use STHEAT??? ? +

?>S THEAT//↑U
S THEAT??? ?
Excellent!

136

```
GALAXY

+      Try SGALAX?                                                    +

?>SGALAX?
You're doing fine!

     If you are not sure of internal spelling you can substitute
a ? for EACH questionable character.  Try selecting WOMAN or
WOMEN.

?>



S WOM?N
Right!

Try for HYDROCHLORIDE or HYDROFLUORIDE.

?>S HYDRO ORIDE

+      Try SHYDRO???ORIDE                                             +

?>SHYDRO ORIDE

+      Try SHYDRO???ORIDE                                             +

?>



SHYDRO \ \???ORIDE
Good show there!

     If you want to specify a limited length for a word ending,
use the number of question marks which corresponds to the longest
acceptable form, skip a space and enter a final question mark.

Try truncating to get just THEATER or THEATRE, or plurals THEATERS
or THEATRES, but not THEATRICAL AGENTS and other longer forms.
?>S THEAT??? ?
Correct!


     Type a system name or type DONE.
>DIALOG
```

```
.RUN DIALOG


CATALYST/II

12 APR 1979      12 37 44.4

LESSON.SECTION[P,PN]:TRAINER
ARE YOU CARUSO     ? ( TYPE YES OR NO) >/T
DO YOU WANT TO SEE ANY MAIL? >N









ENTER YOUR DIALOG PASSWORD>DEC
          LOGON FILE 1 12:38:17


?>.FILE 6
          12-APR-79 12:38:32.7USER DEC
 $0.00      .001 HOURS IN FILE 1
FILE 6:ABI/INFORM

             SET ITEMS DESCRIPTION
             +++ +++++ ++++++++++++

?>?FILES
       1  -NTIS
       2  -OCEANIC ABSTRACTS
       3  -ENGINEERING INDEX
       4  -CAS CONDENSATES
       5  -SOCIOLOGICAL ABS
       6  -ABI/INFORM
       7  -BIOSIS
       8  -PSYCH ABSTRACTS
       9  -ERIC


?>!1
          12-APR-79 12:39:02.4USER DEC
 $0.00     0.000 HOURS IN FILE 6
FILE 1:NTIS

             SET ITEMS DESCRIPTION
             +++ +++++ ++++++++++++
```

```
?>E AU=WICE
 REF    INDEX-TERM              TYPE  ITEMS RT
E 1    AU=WEITER, JOHN J.    -------      2
E 2    AU=WELLER, THOMAS H.--------      1
E 3    AU=WHELAN, THOMAS II--------      1
E 4    AU=WHIPPLE, DAVID     -------      1
E 5    AU=WHITE, R. M.       -------      1
E 6   -AU=WICE               -------
E 7    AU=WICK, R. C.        -------      1
E 8    AU=WIGNALL, G. D.     -------      2
E 9    AU=WILLIAMS, B. F.    -------      1
E10    AU=WILLIAMS, R. S.    -------      1
E11    AU=WILLIAMS, R. T.    -------      1
E12    AU=WILLIAMS, RANDAL   -------      1
E13    AU=WILLIAMSON, G. R.--------      1
E14    AU=WILLINGHAM, C. B.--------      1
E15    AU=WILSON, R. N.      -------      1
E16    AU=↑O
EAU=WEI
 REF    INDEX-TERM              TYPE  ITEMS RT
E 1    AU=WEATHERSBY, A. BU--------      1
E 2    AU=WEAVER, JOHN A.    -------      1
E 3    AU=WEBER, WILLIAM P.--------      1
E 4    AU=WEDDING, DAVID A.--------      1
E 5    AU=WEEKS, W. F.       -------      1
E 6   -AU=WEI                -------
E 7    AU=WEISSMAN, SAMUEL   -------      2
E 8    AU=WEITER, JOHN J.    -------      2
E 9    AU=WELLER, THOMAS H.--------      1
E10    AU=WHELAN, THOMAS II--------      1
E11    AU=WHIPPLE, DAVID     -------      1
E12    AU=WHITE, R. M.       -------      1
E13    AU=WICK, R. C.        -------      1
E14    AU=WIGNALL, G. D.     -------      2
E15    AU=WILLIAMS, B. F.    -------      1
E16    AU=WILLIAMS, R. S.    -------      1
E17    AU=WILLIAMS, R. T.    -------      1

                                        -MORE-
?>EAU=WIS
 REF    INDEX-TERM              TYPE  ITEMS RT
E 1    AU=WILLINGHAM, C. B.--------      1
E 2    AU=WILSON, R. N.      -------      1
E 3    AU=WILSON, R. P. JR   -------      1
E 4    AU=WINHAM, G.         -------      1
E 5    AU=WINTER, ROBERT     -------      1
E 6   -AU=WIS                -------
E 7    AU=WITT, FRED         -------      1
E 8    AU=WITTIG, CURT       -------      1
E 9    AU=WODKIEWICZ↑O
S AU=WEISS?
             1    2   AU=WEISS?
```

```
?>T
    T
    INVALID COMMAND CONTINUATION
?>T1/4/1-2
 1/ 4/ 1


 1/ 4/ 2


?>T1/2/1-2
 1/ 2/ 1


DESIGN OF STEEL STRUCTURES TO RESIST THE EFFECTS OF HE EXPLOSIONS,
AMMANN AND WHITNEY NEW YORK*PICATINNY ARSENAL, DOVER, N.J.   (028300)
AUTHOR: HEALEY, JOHN; AMMAR, ALBERT; VELLOZZI, JOSEPH; PECONE, GEORGE;
 WEISSMAN, SAMUEL
C535655    FLD: 19A, 79A   GRAI7524
AUG 75   221P
CONTRACT: DAAA21-74-C-0452    MONITOR: PA-TR-4837 DESCRIPTORS: *MAGAZI
NES(ORDNANCE STORAGE), *BLAST LOADS, *PROTECTION, STRESSES, BEAMS(STRU
CTURAL), COLUMNS(SUPPORTS), METAL PLATES, STRUCTURES   IDENTIFIERS: *D
ESIGN CRITERIA, NTISDODA
 1/ 2/ 2


DESIGN CHARTS FOR COLD-FORMED STEEL PANELS AND WIDE-FLANGE BEAMS SUBJE
CTED TO BLAST LOADS.
AMMANN AND WHITNEY NEW YORK*PICATINNY ARSENAL, DOVER, N.J.   (028300)
TECHNICAL REPT.
AUTHOR: TSENG, GEORGE; WEISSMAN, SAMUEL; DOBBS, NORVAL; PRICE, PAUL
C535670    FLD: 13M, 19A, 89G, 74E   GRAI7524
AUG 75   312P
CONTRACT: DAAA21-75-C-0222    MONITOR: PA-TR-4838 DESCRIPTORS: *PANELS
, *BEAMS(STRUCTURAL), STEEL, STRUCTURAL MEMBERS, STRUCTURAL STEEL, BLA
ST LOADS, RESISTANCE, SELECTION, LOADS(FORCES), CHARTS, MUNITIONS INDU
STRY IDENTIFIERS: *STEEL STRUCTURES, STRUCTURAL DESIGN, NTISDODA
?>END
12-APR-79  12:43:08 USER DEC
 $0.00      .004 HOURS IN FILE 1
```

```
?>E TETRA
 REF    INDEX-TERM              TYPE ITEMS RT
E 1    TEST METHODS          -------    10
E 2    TESTABLE              -------     1
E 3    TESTERS               -------     1
E 4    TESTING               -------     9
E 5    TESTS                 -------    10
E 6   -TETRA                 -------
E 7    TETRACHLORIDE         -------     1
E 8    TETRAFLUORIDE         -------     1
E 9    TEXTILES              -------     1
E10    TEXTURE               -------     2
E11    THAILAND              -------     1
E12    THALLIUM              -------     1
E13    THAWING               -------     1
E14    THEODORE              -------     1
E15    THEODORE SHIP CHANNE--------      1
E16    THEOREM               -------     3
E17    THEOREMS              -------    10

                                        -MORE-
?>SE7-E8
              2    2   E7-E8

                       E6:  TETRA
?>S TETRA???ORIDE
              3    2   TETRA???ORIDE

?>C2*3
              4    2    2*3
?>T4/5/1-2
 4/ 5/ 1


FUNDAMENTAL AND PRACTICAL EVALUATION OF THE CERAMIC FINISHING PROCESS.
RHODE ISLAND UNIV KINGSTON COLL OF ENGINEERING*NAVAL AIR SYSTEMS COMMA
ND, WASHINGTON, D.C.   (408542)
FINAL TECHNICAL REPT. 15 NOV 72-15 NOV 74
AUTHOR: GIELISEE, P. J.; KIM, T. J.; GOYETTE, L. F.; NAGARKAR, R. V.
C535203    FLD: 11B, 71D   GRAI7524
15 NOV 74   114P
CONTRACT: N00019-72-C-0202    MONITOR: 18    DESCRIPTORS: *CERAMIC MAT
ERIALS, *MACHINING, *GRINDING, ALUMINA, FRACTURE(MECHANICS), CUTTING F
LUIDS, GRAIN SIZE, WATER, ALKANES, ALCOHOLS, CARBON TETRACHLORIDE, TOL
UENES, FLEXURAL PROPERTIES, GRAIN SIZE  IDENTIFIERS: NTISDODN
AD-A015 088/8ST   NTIS PRICES: PC$5.25/MF$2.25
ABSTRACT:THE GEOMETRIC AND KINEMATIC MODES OF MATERIAL REMOVAL HAVE BE
EN DETERMINED FOR FOUR TYPES OF ALUMINAS UNDER DIFFERING ENVIRONMENTAL
 CONDITIONS AND FOR VARIOUS SYSTEM PARAMETERS. THE EFFECT OF VARIOUS L
IQUID ENVIRONMENTS ON THE FORCE LEVELS GENERATED IN SINGLE POINT DIAMO
ND GRINDING OF THREE ALUMINA CERAMICS HAS BEEN DETERMINED. THE LIQUIDS
 USED WERE WATER, N-ALKANES, N-ALCOHOLS, TOLUENE AND CARBON
 4/ 5/ 2
```

```
FLUORINE DISSOCIATION STUDY FOR PULSED CHEMICAL LASERS.
AVCO EVERETT RESEARCH LAB INC EVERETT MASS*OFFICE OF NAVAL RESEARCH, A
RLINGTON, VA.   (048450)
FINAL TECHNICAL REPT. 1 MAY-31 DEC 74
AUTHOR: CHEN, H. L.; TRAINOR, D. W.; FYFE, W. I.; CENTER, R. E.
C535245    FLD: 20E, 7D, 46C, 99F   GRAI7524
JAN 75   86P
CONTRACT: N00014-74-C-0367    MONITOR: 18    DESCRIPTORS: *CHEMICAL LA
SERS, *FLUORINE, *DISSOCIATION, HYDROGEN FLUORIDE, ELECTRON BEAMS, ELE
CTRIC DISCHARGES, REACTION KINETICS, COLLISIONS, ENERGY TRANSFER, TEST
 METHODS, MEASUREMENT, ADDITIVES, CARBON TETRAFLUORIDE, GAS IONIZATION
, HELIUM, ARGON, VIBRATIONAL SPECTRA, RECOMBINATION REACTIONS, SULFUR
COMPOUNDS IDENTIFIERS: *HYDROGEN FLUORIDE LASERS, SULFUR HEXAFLUORIDE,
 NTISDODN
AD-A015 130/8ST   NTIS PRICES: PC$4.75/MF$2.25
ABSTRACT:THIS REPORT PRESENTS EXPERIMENTAL RESULTS FOR THE DISSOCIATIO
N OF F2 IN ELECTRON BEAM SUSTAINED DISCHARGES. TWO DIAGNOSTIC TECHNIQU
ES WERE DEVELOPED FOR THE MEASUREMENT OF TRANSIENT F ATOM CONCENTRATIO
N WITH SENSITIVITY AS HIGH AS F/F2 = OR > 0.00001. THE SUSTAINER ENHAN
CEME
?>S CARBON TET?
             5     2   CARBON TET?

?>T5/1

 5/ 1/ 1- 2
C535203      C535245

?>S OME?N
             6     0   OME?N

?>SWOM?N
             7     0   WOM?N

?>.FILE 1↑U
.FILE8
         12-APR-79 12:48:23.5USER DEC
 $0.00      .017 HOURS IN FILE 1
FILE 8:PSYCH ABSTRACTS

            SET ITEMS DESCRIPTION
            +++ +++++ +++++++++++

?>SWOM?N
             8     2   WOM?N
```

142

```
?>T8/2/1-2
 8/ 2/ 1


59-04721
A SCALE FOR THE MEASUREMENT OF ATTITUDES TOWARDS WOMEN.
BHADRA, B. R.; GIRIJA, P. R.  UNIVERSITY OF AGRICULTURAL SCIENCES, BAN
GALORE, INDIA
ASIAN JOURNAL OF PSYCHOLOGY & EDUCATION   1976 JUL VOL 1(2) 41-44LANGU
AGE: ENGL   CLASSIFICATION: 22
SUBJECT TERMS: TEST CONSTRUCTION, TEST RELIABILITY, ATTITUDE MEASURES,
 FAMILY SOCIOECONOMIC LEVEL, HUMAN FEMALES, SEX ROLE ATTITUDES; 52210,
 52250, 04470, 19270, 23450, 46935 INDEX PHRASE: DEVELOPMENT & RELIABI
LITY & RELATIONSHIP TO SOCIOECONOMIC BACKGROUND, MEASURE OF ATTITUDES
TOWARD WOMEN, STUDENTS
 8/ 2/ 2


59-05100
WORK STATUS, WORK SATISFACTION, AND BLOOD PRESSURE AMONG MARRIED BLACK
 AND WHITE WOMEN.
HAUENSTEIN, LOUISE S.; KASL, STANISLAV V.; HARBURG, ERNEST  U MICHIGAN
, PROGRAM FOR URBAN HEALTH RESEARCH
PSYCHOLOGY OF WOMEN QUARTERLY   1977 SUM VOL 1(4) 334-349   LANGUAGE:
ENGL   CLASSIFICATION: 25, 36
SUBJECT TERMS: OCCUPATIONAL STATUS, JOB SATISFACTION, BLOOD PRESSURE,
NEGROES, CAUCASIANS, WORKING WOMEN, WORKING CONDITIONS, JOB PERFORMANC
E, OCCUPATIONAL STRESS; 35056, 27040, 06330, 33250, 08020, 57135, 5712
0, 27010, 35060INDEX PHRASE: WORK LOAD & SATISFACTION & REPORTED STRAI
N & EVALUATED PERFORMANCE, BLOOD PRESSURE LEVELS, EMPLOYED VS UNEMPLOY
ED MARRIED BLACK & WHITE WOMEN
?>S FEMALE?
             9    19   FEMALE?

?>C8*9
            10     1    8*9
?>S HUMAN
            11    10   HUMAN

?>C9*11
            12     2    9*11
?>T12/1

12/ 1/ 1- 2
59-04733    59-04721
```

6

MODULE 6 -- USING LOGICAL OPERATORS

EACH OF THE SYSTEMS ON THIS TRAINING PACKAGE ALLOWS THE USE OF THE BOOLEAN LOGICAL OPERATORS AND, OR, AND NOT.

IF YOU WOULD LIKE TO KNOW A LITTLE MORE ABOUT THE LOGICAL OPERATORS AND HOW THEIR USE AFFECTS THE OUTCOME OF A SEARCH, JUST HIT THE RETURN KEY.

IF YOU WOULD LIKE TO GO DIRECTLY TO A FEW EXAMPLES AND EXERCISES SHOWING HOW THE OPERATORS ARE IMPLEMENTED ON A GIVEN SYSTEM, TYPE SKIP.

>

THE LOGICAL OPERATORS AND, OR, AND NOT, WHEN USED TO COMBINE SEARCH TERMS, CAN GREATLY AFFECT THE SIZE AND CONTENTS OF THE RESULTS OF A SEARCH.

WE WILL GO THROUGH A BRIEF REVIEW OF THE OPERATORS AND WHAT THEY MEAN BY USING THEM TO COMBINE THE TERMS ECLIPSE AND SOLAR.

OR

IF WE COMBINE THE TERMS USING OR (ECLIPSE OR SOLAR), WE WILL RETRIEVE ITEMS INDEXED BY THE TERM ECLIPSE, OR THE TERM SOLAR, OR BY BOTH TERMS.

AND

IF WE COMBINE THE TERMS USING AND (ECLIPSE AND SOLAR), WE WILL RETRIEVE ONLY THOSE ITEMS INDEXED BY BOTH THE TERM ECLIPSE AND THE TERM SOLAR. IF AN ITEM IS INDEXED BY ONLY ONE OF THE TWO, IT WILL NOT BE RETRIEVED.

NOT

IF WE COMBINE THE TERMS USING NOT (ECLIPSE NOT SOLAR IN DIALOG; OR ECLIPSE AND NOT SOLAR IN ORBIT), WE WILL RETRIEVE ONLY THOSE ITEMS INDEXED BY ECLIPSE THAT WERE NOT ALSO INDEXED BY SOLAR. (POSSIBLY ITEMS ON LUNAR ECLIPSES, ETC.).

THE USE OF OR TO COMBINE TERMS WILL USUALLY RESULT IN MORE ITEMS BEING RETRIEVED THAN WOULD BE THE CASE IF THE SAME TERMS WERE COMBINED USING AND OR NOT. TRY ORING SEVERAL SYNONYMOUS OR CLEARLY RELATED TERMS TOGETHER TO BROADEN YOUR SET.

FOR MORE ITEMS

IF, ON THE OTHER HAND, YOU ARE GETTING TOO MANY ITEMS AS A RESULT OF YOUR SEARCH, YOU CAN NARROW ITS SCOPE BY USING AND TO MAKE YOUR SEARCH MORE SPECIFIC, OR USING NOT TO ELIMINATE POSSIBLY RELATED AREAS THAT YOU ARE NOT CONCERNED WITH.

FOR FEWER ITEMS

THE SYSTEMS REPRESENTED ON THIS TRAINING PACKAGE ARE
DIALOG
ORBIT
BY TYPING ONE OF THE SYSTEM NAMES, YOU CAN SEE HOW THE LOGICAL OPERATORS ARE IMPLEMENTED ON THAT SYSTEM.

TYPE A SYSTEM NAME OR DONE.

>DIALOG

----- DIALOG PRACTICE -----

BELOW ARE THE LOGICAL OPERATORS IN ORDER OF THEIR EXECUTION ON THE DIALOG SYSTEM:

OPERATOR	SYMBOL
(ANY EXPRESSION)	()
NOT	-
AND	*
OR	+

IF THIS IS'NT YOUR FIRST TIME THROUGH, YOU MAY WISH TO SKIP THE LIST OF MAJOR POINTS. TO DO THIS TYPE SKIP. (OTHERWISE, JUST HIT <CR>.)
>
THE FOLLOWING ARE THE MAJOR POINTS ABOUT USING THE LOGICAL OPERATORS ON THE DIALOG SYSTEM:

1. THE LOGICAL OPERATORS MAY ONLY BE USED WITH THE COMBINE COMMAND.

2. THE COMBINE COMMAND MAY ONLY BE USED WITH SET NUMBERS, NOT WITH ACTUAL TERMS, AND NOT WITH E OR R NUMBERS.

3. THE PRIORITY FOR EXECUTION OF THE LOGICAL OPERATIONS WHEN THERE ARE SEVERAL TYPES IN ONE COMBINE STATEMENT IS; NOT OPERATIONS CARRIED OUT FIRST, THEN AND, THEN OR.

4.IF ONE COMBINE STATEMENT CONTAINS MORE THAN ONE OF THE SAME OPERATOR (EG., TWO AND'S IN THE SAME STATEMENT) THE ORDER OF THEIR EXECUTION WILL BE LEFT TO RIGHT.

5. THE ORDER OF EXECUTION OF THE LOGICAL OPERATORS CAN BE ALTERED THROUGH THE USE OF PARENTHESES; ELEMENTS WITHIN PARENTHESES ARE EXECUTED FIRST.

Now let's go through a few examples and exercises to illustrate the above information.

Suppose that we have the following sets of items.

SET	ITEMS	DESCRIPTION
1	1642	CHILDREN
2	397	AGGRESSION
3	1137	TELEVISION
4	247	VIOLENCE

Suppose we wanted to retrieve a set of items indexed by TELEVISION and either AGGRESSION or VIOLENCE. If we typed

```
 ?COMBINE 3 AND 2 OR 4
WHICH IS: TELEVISION AND AGGRESSION OR VIOLENCE
```

This would not retrieve the set we want. To get our desired set, we have to use parentheses.

```
 ?COMBINE 3 AND (2 OR 4)
WHICH IS: TELEVISION AND (AGGRESSION OR VIOLENCE)
```

Using the same sets of items, try typing a statement that will retrieve items indexed by either the term TELEVISION or the term VIOLENCE, and the term CHILDREN.

```
?>HELP

+     COMBINE (3 OR 4) AND 1 WOULD BE ONE POSSIBLE ANSWER.          +


?>
```

```
HELP

+     COMBINE (3 OR 4) AND 1 WOULD BE ONE POSSIBLE ANSWER.          +

?>COMBINE (2 OR 4) AND 1

+     COMBINE (3 OR 4) AND 1 WOULD BE ONE POSSIBLE ANSWER.          +

---  PRACTICE INTERRUPTED  ---

+       Please review the Module 6 material in your Trainer Manual  +
+       or System Guides. If you wish to EXIT and return later,     +
+       type EXIT.                                                  +
+       If you wish to take a quick review and return to the lesson +
+       at the point of this interruption, type GO when             +
+       you are ready.                                              +
```

GO

?>COMBINE (3 OR 4) AND 1
GOOD SHOW THERE,!

WHEN YOU ARE USING THE COMBINE COMMAND, IT IS CONVENIENT TO HAVE A LISTING OF ALL THE SETS YOU HAVE SELECTED. THE DISPLAY SETS COMMAND GIVES YOU JUST SUCH A LISTING. IT IS TYPED:

DS OR DISPLAY SETS

TRY USING IT BELOW:

?>HELP

+ TRY DS OR DISPLAY SETS +

?>DS OR DISPLAY SETS
RIGHT,!

SET	ITEMS	DESCRIPTION
1	1642	CHILDREN
2	397	AGGRESSION
3	1137	TELEVISION
4	247	VIOLENCE

USING THE ABOVE SETS, TRY TYPING A STRATEGY THAT WILL RETRIEVE THOSE ITEMS INDEXED BY CHILDREN AND TELEVISION, BUT NOT INDEXED BY EITHER AGGRESSION OR VIOLENCE.

?>

HELP

+ TRY C (1*3)-(2+4) OR TRY C (1 AND 3) NOT (2 OR 4) +
+ ALSO LEGAL IS C 1 AND 3 NOT (2 OR 4) +

?>

C (1 AND 3) NOT)(2\)\(OR 4)
GOOD SHOW THERE,!

DIALOG PROVIDES TWO SHORTCUTS IN LOGICAL COMBINATION OF TERMS.

SHORTCUT #1

WHEN YOU SELECT A RANGE OR A SEQUENCE OF E NUMBERS OR R NUMBERS FROM AN EXPAND DISPLAY, DIALOG CREATES A NEW SET WHICH INCLUDES ALL DOCUMENTS INDEXED BY EACH OF THE SEVERAL TERMS. THIS IS, IN EFFECT A LOGICAL OR OF THOSE TERMS. SUPPOSE YOU WISH TO OR TERMS E6, E7, E8, AND E9. YOU COULD DO IT IN EITHER OF THE FOLLOWING TWO WAYS:

LONG WAY	SHORT WAY

```
?S E6
  1    400   DISADVANTAGED ADULTS
?S E7
  2    145   DISADVANTAGED CHILDREN
?S E8
  3     76   DISADVANTAGED ENVIRONMENT
?S E9
  4   1322   DISADVANTAGED SCHOOLS
?C 1+2+3+4
  5   1548   1OR2OR3OR4
```

```
?S E6-E9
  1    1548   E6-E9
```

TRY THE SHORT WAY OF SELECTING RELATED TERMS 8, 9, 10, 11, AND 12 FROM A RELATED-TERM LIST:

```
?>SE8-12
+     YOU MUST USE THE R (OR E IF CHOOSING FROM AN E LIST) WITH      +
+     BOTH NUMBERS.                                                  +
?>SR8-R12
YOU'RE DOING FINE!
```

SOMETIMES YOU MAY WISH TO SELECT E OR R TERMS WHICH ARE NOT IN SEQUENCE. YOU CAN STILL USE THIS SHORT WAY BY SEPARATING THE E OR R NUMBERS WITH COMMAS:

```
?S E4,E7,E13
```

WHICH IS ORING THEM JUST AS IN THE LAST EXAMPLE. TRY SELECTING RELATED TERMS 10 AND 12 FROM A RELATED-TERM LIST:

```
?>SR10,R12
GOOD SHOW THERE,!
```

SHORTCUT #2

THERE IS ALSO A SHORT WAY TO COMBINE SETS WHEN YOU WISH TO USE THE SAME LOGICAL OPERATOR ON ALL OF THE SETS.

?C 1OR2OR3OR4OR5

CAN BE SHORTENED TO:

?C 1-5/+

WHICH MEANS THE SAME THING.

TRY COMBINING WITH * (AND) SETS 3 THRU 9:

?>C3-9/*
RIGHT,!

YOU SHOULD NOW HAVE A GOOD IDEA OF HOW THE LOGICAL OPERATORS ARE IMPLEMENTED ON THE DIALOG SYSTEM. AT THIS POINT YOU CAN EITHER TYPE A SYSTEM NAME TO SEE HOW THE OPERATORS ARE IMPLEMENTED ON THAT SYSTEM OR, YOU CAN GO ON TO THE REST OF THIS MODULE BY TYPING DONE.

TYPE A SYSTEM NAME OR DONE.

>EXIT

TYPE ONE OF THE FOLLOWING:
MODULE NUMBER
EMULATOR LETTER
L TO SEE THE LIST OF MODULES AND EMULATORS
EXIT TO RETURN TO THE SYSTEM MONITOR (AND LOGOFF USING K/F)
>EXIT

IF YOU HAVE ANY QUESTIONS, COMMENTS, PROBLEMS:
AFTER THE MONITOR PROMPT (.) TYPE R MAIL AND FOLLOW THIS FORM:
.R MAIL
TO:134057↑O

TOTAL ELAPSED TIME FOR THIS LESSON IS 0:25:41.2

EXIT

>6
MODULE 6 -- USING LOGICAL OPERATORS
==========

EACH OF THE SYSTEMS ON THIS TRAINING PACKAGE ALLOWS THE USE OF THE BOOLEAN LOGICAL OPERATORS AND, OR, AND NOT.

IF YOU WOULD LIKE TO KNOW A LITTLE MORE ABOUT THE LOGICAL OPERATORS AND HOW THEIR USE AFFECTS THE OUTCOME OF A SEARCH, JUST HIT THE RETURN KEY.

IF YOU WOULD LIKE TO GO DIRECTLY TO A FEW EXAMPLES AND EXERCISES SHOWING HOW THE OPERATORS ARE IMPLEMENTED ON A GIVEN SYSTEM, TYPE SKIP.

>SKIP

THE SYSTEMS REPRESENTED ON THIS TRAINING PACKAGE ARE
DIALOG
ORBIT
BY TYPING ONE OF THE SYSTEM NAMES, YOU CAN SEE HOW THE LOGICAL OPERATORS ARE IMPLEMENTED ON THAT SYSTEM.

TYPE A SYSTEM NAME OR DONE.

>DIALOG

----- DIALOG PRACTICE -----

BELOW ARE THE LOGICAL OPERATORS IN ORDER OF THEIR EXECUTION ON THE DIALOG SYSTEM:

OPERATOR	SYMBOL
(ANY EXPRESSION)	()
NOT	-
AND	*
OR	+

IF THIS IS'NT YOUR FIRST TIME THROUGH, YOU MAY WISH TO SKIP THE LIST OF MAJOR POINTS. TO DO THIS TYPE SKIP. (OTHERWISE, JUST HIT <CR>.)
>SKIP

Now let's go through a few examples and exercises to illustrate the above information.

Suppose that we have the following sets of items.

SET	ITEMS	DESCRIPTION
1	1642	CHILDREN
2	397	AGGRESSION
3	1137	TELEVISION
4	247	VIOLENCE

Suppose we wanted to retrieve a set of items indexed by TELEVISION and either AGGRESSION or VIOLENCE. If we typed

```
?COMBINE 3 AND 2 OR 4
```

which is: TELEVISION AND AGGRESSION OR VIOLENCE

This would not retrieve the set we want. To get our desired set, we have to use parentheses.

```
?COMBINE 3 AND (2 OR 4)
```

which is: TELEVISION AND (AGGRESSION OR VIOLENCE)

Using the same sets of items, try typing a statement that will retrieve items indexed by either the term TELEVISION or the term VIOLENCE, and the term CHILDREN.

```
?>C 1 AND (3 OR 4)
Right!
```

When you are using the COMBINE command, it is convenient to have a listing of all the sets you have selected. The DISPLAY SETS command gives you just such a listing. It is typed:

```
DS or DISPLAY SETS
```

Try using it below:

```
?>DS
Good!
```

SET	ITEMS	DESCRIPTION
1	1642	CHILDREN
2	397	AGGRESSION
3	1137	TELEVISION
4	247	VIOLENCE

Using the above sets, try typing a strategy that will retrieve those items indexed by CHILDREN and TELEVISION, but not indexed by either AGGRESSION or VIOLENCE.

```
?>C 1 AND 3 NOT  >2 OR 4)

+       Try C (1*3)-(2+4) or try C (1 AND 3) NOT (2 OR 4)          +
+       Also legal is C 1 AND 3 NOT (2 OR 4)                       +

?>
```

```
C (1*3)-(2+4)
Good,!
```

DIALOG provides two shortcuts in logical combination of terms.

SHORTCUT #1

When you select a range or a sequence of E numbers or R numbers from an EXPAND display, DIALOG creates a new SET which includes all documents indexed by each of the several terms. This is, in effect a logical OR of those terms. Suppose you wish to OR terms E6, E7, E8, and E9. You could do it in either of the following two ways:

Long Way	Short Way
?S E6	?S E6-E9
1 400 DISADVANTAGED ADULTS	1 1548 E6-E9
?S E7	
2 145 DISADVANTAGED CHILDREN	
?S E8	
3 76 DISADVANTAGED ENVIRONMENT	
?S E9	
4 1322 DISADVANTAGED SCHOOLS	
?C 1+2+3+4	
5 1548 1OR2OR3OR4	

Try the Short Way of SELECTing RELATED terms 8, 9, 10, 11, and 12 from a related-term list:

```
?>S R8-R12
Right!
```

Sometimes you may wish to SELECT E or R terms which ARE NOT in sequence. You can still use this Short Way by separating the E or R numbers with COMMAS:

```
?S E4,E7,E13
```

which is ORing them just as in the last example. Try SELECTing RELATED terms 10 and 12 from a related-term list:

```
?>S R10, R12
Right on,!
```

SHORTCUT #2
        THERE IS ALSO A SHORT WAY TO COMBINE SETS WHEN YOU WISH TO USE THE SAME LOGICAL OPERATOR ON ALL OF THE SETS.

                ?C 1OR2OR3OR4OR5
CAN BE SHORTENED TO:
                ?C 1-5/+
WHICH MEANS THE SAME THING.

        TRY COMBINING WITH * (AND) SETS 3 THRU 9:

?>C 3-9/*
GOOD SHOW THERE!

     YOU SHOULD NOW HAVE A GOOD IDEA OF HOW THE LOGICAL OPERATORS ARE IMPLEMENTED ON THE DIALOG SYSTEM. AT THIS POINT YOU CAN EITHER TYPE A SYSTEM NAME TO SEE HOW THE OPERATORS ARE IMPLEMENTED ON THAT SYSTEM OR, YOU CAN GO ON TO THE REST OF THIS MODULE BY TYPING DONE.

    TYPE A SYSTEM NAME OR DONE.

>

DONE

TYPE ONE OF THE FOLLOWING:
MODULE NUMBER
EMULATOR LETTER
L TO SEE THE LIST OF MODULES AND EMULATORS
EXIT TO RETURN TO THE SYSTEM MONITOR (AND LOGOFF USING K/F)
>EXIT

IF YOU HAVE ANY QUESTIONS, COMMENTS, PROBLEMS:
AFTER THE MONITOR PROMPT (.) TYPE R MAIL AND FOLL↑O

TOTAL ELAPSED TIME FOR THIS LESSON IS 0:7:3.4

EXIT

153

```
!1
        12-Apr-79 13:06:38.3USER DEC
 $0.00      .038 HOURS IN FILE 1
FILE 1:NTIS

            SET ITEMS DESCRIPTION
            +++ +++++ ++++++++++

?>S LENS?
              1    5   LENS?

?>SCATARACT?
              2    2   CATARACT?

?>S MICROWAVE?
              3    6   MICROWAVE?

?>C(1+2)*3
              4    2    (1+2)*3
?>T4/2/1-2
 4/ 2/ 1


Ascorbic Acid Changes in Cultured Rabbit Lenses after Microwave Irradi
ation.
Naval Medical Research Inst Bethesda Md*Bureau of Medicine and Surgery
, Washington, D.C.   (249650)
Medical research progress rept.
AUTHOR: Weiter, John J.; Finch, Edward D.; Schultz, Warren; Frattali,
Victor
C535566    Fld: 6R, 57V   GRAI7524
1975   9p
Project: MF51.524   Task: MF51-524-015  Monitor: 18    Availability: P
ub. in Annals of the New York Academy of Sciences, v247 p175-181, 28 F
eb 75.    Descriptors: *Lens(Eye), *Radiation effects, *Ascorbic acid,
 Microwaves, Rabbits, Whole body irradiation, S band, Damage, Continuo
us waves, Pulses, Culture media, Power levels, Thermal stresses, Repri
nts  Identifiers: NTISDODXR, NTISDODN
 4/ 2/ 2


Ultrastructural Changes in the Rabbit Lens Induced by Microwave Radiat
ion.
Naval Medical Research Inst Bethesda Md*Bureau of Medicine and Surgery
, Washington, D.C.   (249650)
Medical research progress rept.
AUTHOR: Williams, Randal J.; McKee, Adam E.; Finch, Edward D.
C535565    Fld: 6R, 57V   GRAI7524
1975   13p
Project: MF51-524, M4318 Monitor: 18    Availability: Pub. in Annals o
f the New York Academy of Sciences, v247 p166-174, 28 Feb 75.    Descr
iptors: *Lens(Eye), *Radiation effects, Microwaves, Damage, Rabbits, M
icrostructure, Cataracts, S band, Electron microscopy, Pathology, Repr
ints Identifiers: Ultrastructure, NTISDODXR, NTISDODN
```

```
?>E LENS
 REF    INDEX-TERM              TYPE  ITEMS RT
E 1    LEED                    -------     2
E 2    LEED CRYSTALLOGRAPHY----------      2
E 3    LEGALLY                 -------     2
E 4    LEGISLATION             -------     4
E 5    LENGTH                  -------     3
E 6 -  LENS                    -------     3
E 7    LENS(EYE)               -------     3
E 8    LENSES                  -------     4
E 9    LESIONS                 -------     1
E10    LETHALITY               -------     1
E11    LEUKOCYTES              ----+0
E EYE
 REF    INDEX-TERM              TYPE  ITEMS RT
E 1    EXTRACTION              -------     3
E 2    EXTRATERRESTRIAL        -------     2
E 3    EXTRATERRESTRIAL RAD----------      2
E 4    EXTREMELY               -------     1
E 5    EXTREMELY LOW FREQUE----------      1
E 6 -  EYE                     -------     3
E 7    EYEPIECE                -------     1
E 8    F                       -------     4
E 9    F VALUES                -------     1
E10+0
C+U
SE6
            5    3   EYE

?>DS
          SET ITEMS DESCRIPTION (+=OR;*=AND;-=NOT)
          +++ +++++ ++++++++++++

           1    5    LENS?
           2    2    CATARACT?
           3    6    MICROWAVE?
           4    2    (1+2)*3
           5    3    EYE
?>C1 AND 5
           6    3    1 AND 5
?>T3 *5
ARGUMENT SYNTAX ERROR
?>C (1+2+5) * 3
           7    2    (1+2+5) * 3
?>T7/1

 7/ 1/ 1- 2
C535565     C535566
```

```
?>.FILE8
          12-Apr-79 13:19:55.2USER DEC
 $0.00      .008 HOURS IN FILE 9
FILE 8:PSYCH ABSTRACTS

            SET  ITEMS  DESCRIPTION
            +++  +++++  +++++++++++

?>SHUMAN?
              8     20    HUMAN?

?>S FAMILY
              9      3    FAMILY

?>S FAMIL?
             10      4    FAMIL?

?>C8*10
             11      1     8*10
?>T11/2
11/2/ 1


59-04721
A SCALE FOR THE MEASUREMENT OF ATTITUDES TOWARDS WOMEN.
BHADRA, B. R.; GIRIJA, P. R.  UNIVERSITY OF AGRICULTURAL SCIENCES, BAN
GALORE, INDIA
ASIAN JOURNAL OF PSYCHOLOGY & EDUCATION   1976 JUL VOL 1(2) 41-44LANGU
AGE: ENGL    CLASSIFICATION: 22
SUBJECT TERMS: TEST CONSTRUCTION, TEST RELIABILITY, ATTITUDE MEASURES,
 FAMILY SOCIOECONOMIC LEVEL, HUMAN FEMALES, SEX ROLE ATTITUDES; 52210,
 52250, 04470, 19270, 23450, 46935 INDEX PHRASE: DEVELOPMENT & RELIABI
LITY & RELATIONSHIP TO SOCIOECONOMIC BACKGROUND, MEASURE OF ATTITUDES
TOWARD WOMEN, STUDENTS
?>
```

59-04863
THE EFFECTS OF THE NUMBER AND SPACING OF BASE ITEM REPETITIONS ON REAC
TION TIME TO STROOP-TYPE STIMULI.
?>T
?>T
?>T10
10/2/ 1

S FAMIL?

59-04863
THE EFFECTS OF THE NUMBER AND SPACING OF BASE ITEM REPETITIONS ON REAC
TION TIME TO STROOP-TYPE STIMULI.
HINTON, WILLIAM M. STATE U NEW YORK, BUFFALO
DISSERTATION ABSTRACTS INTERNATIONAL 1976 AUG VOL 37(2-B) 1005 LANGU
AGE: ENGL CLASSIFICATION: 23
SUBJECT TERMS: FAMILIARITY, STROOP COLOR WORD TEST, REACTION TIME, HUM
AN INFORMATION STORAGE, MEMORY, RECALL (LEARNING); 19160, 50250, 43000
, 23480, 30570, 43290 INDEX PHRASE: NUMBER & SPACING OF BASE ITEM R
EPETITIONS, RT TO STROOP-TYPE STIMULI
?>T
?>LOGOFF
12-Apr-79 13:23:05 USER DEC
 $0.00 .003 HOURS IN FILE 8
LOGOFF @ 13:23:05

----- End of emulation of DIALOG -----

Type CAL to return to the Catalyst CAL modules;
type K/F to Logoff the system; or
type EXIT to return to the system monitor:

.>K/F
% QUENFI No files in request
Job 44 [134057,120121] off TTY26 at 1323 12-Apr-79 Connect=47 Min
Disk R+W=1697+146 Tape ID=0 Saved all files (2106 blocks)
CPU 0:20 Core HWM=23P Units=0.1417 ($10.63)

157

STI SERVICES TRAINER
====================

COMPUTER ASSISTED LEARNING AND PRACTICE MODULES

TYPE IN THE NUMBER OF THE MODULE (1 THRU 7), OR
THE LETTER OF THE EMULATOR (A OR B), OR
L TO SEE THE LIST OF MODULES AND EMULATORS, OR
E FOR AN EXPLANATION:

>7

MODULE 7 -- USING OUTPUT COMMANDS AND FORMATS
==

WHEN YOU HAVE MADE A SEARCH, YOU WANT TO SEE THE RESULT:
--FIRST TO DECIDE WHETHER TO REVISE YOUR STRATEGY, AND
  TO GET HINTS ABOUT WAYS TO CHANGE IT;
--SECOND TO SERVE AS A RECORD FOR USE IN OBTAINING A FULL
  COPY OF SOME OF THE REFERENCES RETRIEVED.

SYSTEMS COVERED IN THIS MODULE:

    DIALOG AND ORBIT

TYPE THE NAME OF THE SYSTEM YOU WANT TO WORK WITH, OR TYPE DONE:

>DIALOG

        ----- DIALOG PRACTICE -----

    THE PROCEDURES COVERED ARE:

      1. GETTING OUTPUT ONLINE AND OFFLINE

      2. CHECKING THE RELEVANCE OF RESULTS AND DISCOVERING
         ADDITIONAL SEARCH TERMS

      3. CHOOSING AN APPROPRIATE OUTPUT FORMAT

      4. ENDING THE SEARCH

YOU SHOULD HAVE THE BRIEF GUIDE TO DIALOG SEARCHING BESIDE YOU
WHENEVER YOU SEARCH A FILE UNLESS YOU KNOW IT VERY WELL.

IF YOU HAVE IT NOW, TURN TO PAGES 52 AND 60, THE DESCRIPTIONS
OF DIALOG FILES #1, ERIC, AND #6, NTIS, AND NOTE FORMATS AVAILABLE.
THESE ARE ALSO GIVEN IN THE TRAINER MANUAL, P. 23.

1 GETTING OUTPUT ONLINE OR OFFLINE

IF YOU HAVE A VERY FEW ITEMS THAT YOU WANT PRINTED OUT, OR IF YOU NEED IMMEDIATE INFORMATION, IT WOULD BE BEST FOR YOU TO HAVE YOUR RESULTS PRINTED OUT FOR YOU ONLINE.

IF YOU HAVE A LARGE NUMBER OF DOCUMENTS, HOWEVER, AND YOUR INFORMATION NEED IS NOT IMMEDIATE, THEN IT IS USUALLY BEST TO HAVE YOUR RESULTS PRINTED OUT OFFLINE.

IF YOU ARE USING A VIDEO DISPLAY TERMINAL, YOU MUST HAVE YOUR RESULTS PRINTED OFFLINE TO GET ANY HARD COPY.

TO HAVE AN ITEM PRINTED ONLINE ON A TELETYPE TYPE OF TERMINAL, YOU SHOULD USE THE TYPE OR T COMMAND. IT IS TYPED AS FOLLOWS:

?TYPE 1/2/5

THE 1 IS THE SET NUMBER. (REMEMBER SFI - SAN
THE 2 IS THE FORMAT TYPE. FRANCISCO INTERCHANGE!)
THE 5 IS THE ITEM NO.

TRY TYPING THE COMMAND STRING TO HAVE RECORD 4 OF SET 3 TYPED ON YOUR TERMINAL IN FORMAT 2.

?>HELP

\+ TRY T 3/2/4 +

?>T 3/2/4
RIGHT!
YOUR TERMINAL DISPLAY MIGHT LOOK LIKE THIS:

ED115507 SE019981
CHEMISTRY, TEACHER'S CURRICULUM GUIDE FOR THE THIRTEEN-COLLEGES CURRICULUM PROGRAM
BOOKER,EDWARD: AND OTHERS
INSTITUTE FOR SERVICES TO EDUCATION, INC., WASHINGTON, D.C.
PUBL. DATE: 1971

To print items offline, the PRINT or PR command is used. The format of the PRINT command is the same as that for the Type command.

?PR 5/2/1-15

The 1-15 in the item no. position means that a range of items (numbers 1 thru 15) is to be printed instead of just one item. The system will answer with a message echoing your command. For example:

You type ? PR 4/3/1-14

System answers PRINT4/3/1-14

Your print request has thus been confirmed.

Ask DIALOG to print all 30 documents of an NTIS set #1 in the fullest available format.

```
?>HELP
+   Use PR 1/5/1-30                                                    +
?>PR 1/5/2-30
+   Use PR 1/5/1-30                                                    +
?>PR 1/5/1-30
You're doing fine,!
```

To delete an offline PRINT request, use PRINT-. The minus sign with the PRINT command eliminates the last previous print request.

Try deleting the last print request.

```
?>HELP
+    Try again                                                         +
?>PR-
Right on!
```

If you wanted to delete just the PRINT request before that, you would have to type PRINT- twice, then reorder the last one.

2 CHECKING FOR RELEVANCE AND FINDING NEW OR DIFFERENT SEARCH TERMS

THE BEST WAY TO CHECK YOUR SEARCH RESULTS FOR RELEVANCE IS TO SEE A SAMPLING OF THEM ONLINE.

THE OUTPUT FORMATS AVAILABLE DEPEND ON WHICH DATABASE YOU ARE SEARCHING.

ASSUME THAT YOU ARE SEARCHING THE ERIC FILE. USING THE BRIEF GUIDE, FILE 1, P. 52, OR TRAINER MANUAL P. 23, DECIDE WHICH FORMAT WOULD BE MOST USEFUL TO YOU IN ASSESSING THE VALUE OF A REFERENCE. ASK TO SEE ITEM 3 FROM SET 4.

?>HELP

\+ TRY T 4/5/3 +

?>T 4/5/2

\+ TRY T 4/5/3 +

?>T 4/5/3
RIGHT ON,!
THE RESULT WOULD LOOK SOMETHING LIKE THIS:

ED115507 SE019981
CHEMISTRY, TEACHER'S CURRICULUM GUIDE FOR THE THIRTEEN-COLLEGE CURRICULUM PROGRAM
BOOKER,EDWARD: AND OTHERS
INSTITUTE FOR SERVICES TO EDUCATION, INC., WASHINGTON, D.C.
PUBL. DATE: 71 NOTE: 89P.: APPENDIX MATERIAL FROM ED 084936: FOR RELATED DOCUMENTS, SEE SF 019 980-983
DESCRIPTORS: ♦CHEMISTRY/ ♦COLLEGE SCIENCE/ CURRICULUM/ CURRICULUM DEVELOPMENT/ ♦DISADVANTAGED YOUTH/ INSTRUCTIONAL MATERIALS/ SCIENCE EDUCATION/ ♦TEACHING GUIDES
IDENTIFIERS: THIRTEEN-COLLEGE CURRICULUM PROGRAM

(AN ABSTRACT FOLLOWS HERE)

THE DESCRIPTORS WITH ♦ BEFORE THEM ARE MAJOR DESCRIPTORS. THEY MAY BE TERMS WHICH YOU COULD USE AS ADDITIONAL SEARCH TERMS.
IF YOU WERE INTERESTED IN SEEING MAJOR DESCRIPTORS IN AN NTIS RECORD, WHAT COMMAND WOULD YOU HAVE TO USE FOR ITEM 2 OF SET 2?
?>HELP
\+ IT'S T 2/5/2 +
?>T 2/5/2
YOU'RE DOING FINE!

3 CHOICE OF AN APPROPRIATE FORMAT

THE OUTPUT FORMAT THAT YOU SHOULD CHOOSE DEPENDS UPON THE TYPE OF INFORMATION THAT YOU WANT. FOR EXAMPLE, IF YOU ONLY WANTED ENOUGH INFORMATION TO GO AND LOOK FOR THE SOURCE DOCUMENTS, YOU COULD USE A FORMAT THAT GIVES YOU BIBLIOGRAPHIC CITATIONS FOR THE ITEMS.

UNFORTUNATELY, THE NUMBER USED TO DESIGNATE A GIVEN TYPE OF FORMAT IS NOT ALWAYS CONSISTENT FROM ONE FILE TO ANOTHER (I.E., THE BIBLIOGRAPHIC CITATION FORMAT MIGHT BE DESIGNATED AS FORMAT 2 ON ONE FILE, BUT AS FORMAT 5 ON ANOTHER). ALSO, A GIVEN FORMAT MAY NOT EVEN BE AVAILABLE ON SOME FILES. THIS VARIATION MAKES IT NECESSARY TO REFER TO THE REFERENCE MATERIALS ON A GIVEN FILE TO FIND OUT WHAT FORMAT NUMBER TO USE. THIS SHOULD BE DONE BEFORE YOU GET ONLINE AND BEGIN SEARCHING TO SAVE TIME AND MONEY.

ASSUME FOR THE MOMENT THAT YOU ARE SEARCHING THE ERIC DATABASE. GET THE BIBLIOGRAPHIC CITATION FOR RECORD 7 FROM SET 3 TYPED ONLINE.

?>HELP

\+ TRY T 3/2/7 +

?>T 3/2/7
GOOD!
YOU WOULD RECEIVE A DISPLAY LIKE THIS:

ED115507 SE019981
CHEMISTRY, TEACHER'S CURRICULUM GUIDE FOR THE THIRTEEN-COLLEGE CURRICULUM PROGRAM
BOOKER,EDWARD: AND OTHERS
INSTITUTE FOR SERVICES TO EDUCATION, INC., WASHINGTON, D.C.
SPONSORING AGENCY: NATIONAL INST. OF EDUCATION (DHEW), WASHINGTON, D.C.
BUREAU NO.: BR-7-0867
CONTRACT NO.: OEC-0-8-070867-0001
PUBL. DATE: 71

THIS IS THE BIBLIOGRAPHIC FORMAT AS IT WOULD BE DISPLAYED FOR THE ERIC FILE.

TRY THE COMMAND STRING YOU WOULD NEED TO SEE THE ABSTRACT FOR THIS DOCUMENT.
?>HELP
\+ USE T3/4/7 +
?>T3/4/7
\+ THAT'S RIGHT. +

4 ENDING A DIALOG SEARCH

TAKE A MOMENT TO REVIEW THE COMMANDS BEGINn AND .FILEn PAYING ATTENTION TO THE EFFECTS THEY HAVE ON YOUR PREVIOUS SEARCH HISTORY. SEE PAGES 6 AND 50 IN THE DIALOG GUIDE AND/OR PAGE 12 IN THE TRAINER MANUAL.

IF YOU WANTED TO MAKE A SEARCH IN BOTH ERIC AND NTIS, WITHOUT LOSING YOUR CURRENT SEARCH HISTORY, WHAT COMMAND WOULD YOU USE TO GET FROM ERIC (FILE 1) TO NTIS (FILE 6)?
?>

BEGIN6
YOU MAY END A SEARCH BY USING BEGINn AGAIN, BUT THIS WILL ERASE ALL PREVIOUS SEARCH HISTORY AND START YOU OFF AGAIN WITH SET #1.

IF HOWEVER YOU USE .FILEn (DON'T FORGET THE PERIOD) THE PREVIOUS SEARCHES WILL NOT BE ERASED.

THIS WILL PERMIT YOU TO USE THE DISPLAY SETS (OR DS) COMMAND WHEN YOU NEED TO REFRESH YOUR MEMORY, LATER ON.
FILES.
TRY AGAIN.
?>.FILE6
EXCELLENT,!
THIS SAVES YOUR PREVIOUS SEARCH HISTORIES FOR FURTHER REFERENCE.

THE OTHER TWO WAYS TO END A SEARCH ARE THE COMMANDS END AND LOGOFF. THEY BOTH GIVE A SUMMARY OF SEARCH EVENTS AND AN ESTIMATE OF COST. END IS MISLEADING BECAUSE IT DOESN'T CHANGE FILES, OR END ANYTHING; IT JUST SUMMARIZES YOUR ACTIVITY FOR YOU. LOGOFF DOES EXACTLY WHAT IT SAYS. TRY IT.

?>END
+ TYPE LOGOFF. +

?>LOGOFF
13 AUG 77 9:09:50 USER 316
$0.28 0.0004 HOURS IN FILE 34
LOGOFF 09:09:56

ALL FOUR OF THESE COMMANDS (FILEN, .BEGINN, END, AND LOGOFF) FINALIZE ANY PRINT COMMANDS; THAT IS, YOU CANNOT CANCEL WITH PRINT- THE PRINTS YOU HAVE ORDERED.

YOU CAN EITHER GO ON TO THE MATERIALS ON ANOTHER SYSTEM BY TYPING THE SYSTEM NAME, OR, IF YOU ARE FINISHED, TYPE DONE.

TYPE THE NAME OF THE SYSTEM YOU WANT TO WORK WITH, OR TYPE DONE:

>DONE
THE MATERIAL PRESENTED HERE ON THESE PROCEDURES HAS BEEN SIMPLE AND BRIEF. THERE ARE MANY DETAILS AND VARIATIONS ON EACH PROCEDURE WHICH YOU CAN LOOK UP IN THE BRIEF GUIDE OR QUICK REFERENCE WHEN YOU ARE READY TO USE THEM. YOU CAN PRACTICE ALL DIALOG AND ORBIT OUTPUT COMMANDS ON THE A AND B MODULES.

----- END OF MODULE 7 -----

TYPE ONE OF THE FOLLOWING:
MODULE NUMBER
EMULATOR LETTER
L TO SEE THE LIST OF MODULES AND EMULATORS
EXIT TO RETURN TO THE SYSTEM MONITOR (AND LOGOFF USING K/F)
>A

ENTER YOUR DIALOG PASSWORD>DEE
LOGON FILE 1 15:13:24

?>LOGOFF
15:13:31 USER DEE
$0.00 .001 HOURS IN FILE 1
LOGOFF @ 15:13:31

101

----- DIALOG PRACTICE -----

THE PROCEDURES COVERED ARE:

1. SETTING OUTPUT ONLINE AND OFFLINE

2. CHECKING THE RELEVANCE OF RESULTS AND DISCOVERING ADDITIONAL SEARCH TERMS

3. CHOOSING AN APPROPRIATE OUTPUT FORMAT

4. ENDING THE SEARCH

YOU SHOULD HAVE THE BRIEF GUIDE TO DIALOG SEARCHING BESIDE YOU WHENEVER YOU SEARCH A FILE UNLESS YOU KNOW IT VERY WELL.

IF YOU HAVE IT NOW, TURN TO PAGES 52 AND 60, THE DESCRIPTIONS OF DIALOG FILES #1, ERIC, AND #6, NTIS, AND NOTE FORMATS AVAILABLE. THESE ARE ALSO GIVEN IN THE TRAINER MANUAL, P. 23.

1 GETTING OUTPUT ONLINE OR OFFLINE

IF YOU HAVE A VERY FEW ITEMS THAT YOU WANT PRINTED OUT, OR IF YOU NEED IMMEDIATE INFORMATION, IT WOULD BE BEST FOR YOU TO HAVE YOUR RESULTS PRINTED OUT FOR YOU ONLINE.

IF YOU HAVE A LARGE NUMBER OF DOCUMENTS, HOWEVER, AND YOUR INFORMATION NEED IS NOT IMMEDIATE, THEN IT IS USUALLY BEST TO HAVE YOUR RESULTS PRINTED OUT OFFLINE.

IF YOU ARE USING A VIDEO DISPLAY TERMINAL, YOU MUST HAVE YOUR RESULTS PRINTED OFFLINE TO GET ANY HARD COPY.

TO HAVE AN ITEM PRINTED ONLINE ON A TELETYPE TYPE OF TERMINAL, YOU SHOULD USE THE TYPE OR T COMMAND. IT IS TYPED AS FOLLOWS:

```
?TYPE 1/2/5
```

THE 1 IS THE SET NUMBER. (REMEMBER SFI - SAN
THE 2 IS THE FORMAT TYPE. FRANCISCO INTERCHANGE!)
THE 5 IS THE ITEM NO.

TRY TYPING THE COMMAND STRING TO HAVE RECORD 4 OF SET 3 TYPED ON YOUR TERMINAL IN FORMAT 2.

```
?>T 3/2/4
RIGHT!
YOUR TERMINAL DISPLAY MIGHT LOOK LIKE THIS:

ED115507   SE019981
  CHEMISTRY, TEACHER'S CURRICULUM GUIDE FOR THE THIRTEEN-COLLEGES
CURRICULUM PROGRAM
  BOOKER,EDWARD: AND OTHERS
  INSTITUTE FOR SERVICES TO EDUCATION, INC., WASHINGTON, D.C.
  PUBL. DATE: 1971
```

To print items offline, the PRINT or PR command is used. The format of the PRINT command is the same as that for the Type command.

?PR 5/2/1-15

The 1-15 in the item no. position means that a range of items (numbers 1 thru 15) is to be printed instead of just one item. The system will answer with a message echoing your command. For example:

You type ? PR 4/3/1-14

System answers PRINT4/3/1-14

Your print request has thus been confirmed.

Ask DIALOG to print all 30 documents of an NTIS set #1 in the fullest available format.
?>PR 1/5/1-30
Excellent,!

To delete an offline PRINT request, use PRINT-. The minus sign with the PRINT command eliminates the last previous print request.

Try deleting the last print request.
?>PR-
Correct,!

If you wanted to delete just the PRINT request before that, you would have to type PRINT- twice, then reorder the last one.

2 CHECKING FOR RELEVANCE AND FINDING NEW OR DIFFERENT SEARCH TERMS

THE BEST WAY TO CHECK YOUR SEARCH RESULTS FOR RELEVANCE IS TO SEE A SAMPLING OF THEM ONLINE.

THE OUTPUT FORMATS AVAILABLE DEPEND ON WHICH DATABASE YOU ARE SEARCHING.

ASSUME THAT YOU ARE SEARCHING THE ERIC FILE. USING THE BRIEF GUIDE, FILE 1, P. 52, OR TRAINER MANUAL P. 23, DECIDE WHICH FORMAT WOULD BE MOST USEFUL TO YOU IN ASSESSING THE VALUE OF A REFERENCE. ASK TO SEE ITEM 3 FROM SET 4.

?>T 4/5/3
CORRECT,!
THE RESULT WOULD LOOK SOMETHING LIKE THIS:

ED115507 SE019981
CHEMISTRY, TEACHER'S CURRICULUM GUIDE FOR THE THIRTEEN-COLLEGE CURRICULUM PROGRAM
BOOKER,EDWARD: AND OTHERS
INSTITUTE FOR SERVICES TO EDUCATION, INC., WASHINGTON, D.C.
PUBL. DATE: 71 NOTE: 89P.: APPENDIX MATERIAL FROM ED 084936: FOR RELATED DOCUMENTS, SEE SF 019 980-983
DESCRIPTORS: ♦CHEMISTRY/ ♦COLLEGE SCIENCE/ CURRICULUM/ CURRICULUM DEVELOPMENT/ ♦DISADVANTAGED YOUTH/ INSTRUCTIONAL MATERIALS/ SCIENCE EDUCATION/ ♦TEACHING GUIDES
IDENTIFIERS: THIRTEEN-COLLEGE CURRICULUM PROGRAM

(AN ABSTRACT FOLLOWS HERE)

THE DESCRIPTORS WITH ♦ BEFORE THEM ARE MAJOR DESCRIPTORS. THEY MAY BE TERMS WHICH YOU COULD USE AS ADDITIONAL SEARCH TERMS.
IF YOU WERE INTERESTED IN SEEING MAJOR DESCRIPTORS IN AN NTIS RECORD, WHAT COMMAND WOULD YOU HAVE TO USE FOR ITEM 2 OF SET 2?
?>T 2/5/2
GOOD SHOW THERE,!

3 CHOICE OF AN APPROPRIATE FORMAT

THE OUTPUT FORMAT THAT YOU SHOULD CHOOSE DEPENDS UPON THE TYPE OF INFORMATION THAT YOU WANT. FOR EXAMPLE, IF YOU ONLY WANTED ENOUGH INFORMATION TO GO AND LOOK FOR THE SOURCE DOCUMENTS, YOU COULD USE A FORMAT THAT GIVES YOU BIBLIOGRAPHIC CITATIONS FOR THE ITEMS.

UNFORTUNATELY, THE NUMBER USED TO DESIGNATE A GIVEN TYPE OF FORMAT IS NOT ALWAYS CONSISTENT FROM ONE FILE TO ANOTHER (I.E., THE BIBLIOGRAPHIC CITATION FORMAT MIGHT BE DESIGNATED AS FORMAT 2 ON ONE FILE, BUT AS FORMAT 5 ON ANOTHER). ALSO, A GIVEN FORMAT MAY NOT EVEN BE AVAILABLE ON SOME FILES. THIS VARIATION MAKES IT NECESSARY TO REFER TO THE REFERENCE MATERIALS ON A GIVEN FILE TO FIND OUT WHAT FORMAT NUMBER TO USE. THIS SHOULD BE DONE BEFORE YOU GET ONLINE AND BEGIN SEARCHING TO SAVE TIME AND MONEY.

ASSUME FOR THE MOMENT THAT YOU ARE SEARCHING THE ERIC DATABASE. GET THE BIBLIOGRAPHIC CITATION FOR RECORD 7 FROM SET 3 TYPED ONLINE.

?>T 3/2/7
CORRECT!
YOU WOULD RECEIVE A DISPLAY LIKE THIS:

ED115507 SE019981
CHEMISTRY, TEACHER'S CURRICULUM GUIDE FOR THE THIRTEEN-COLLEGE CURRICULUM PROGRAM
BOOKER,EDWARD: AND OTHERS
INSTITUTE FOR SERVICES TO EDUCATION, INC., WASHINGTON, D.C.
SPONSORING AGENCY: NATIONAL INST. OF EDUCATION (DHEW), WASHINGTON, D.C.
BUREAU NO.: BR-7-0867
CONTRACT NO.: OEC-0-8-070867-0001
PUBL. DATE: 71

THIS IS THE BIBLIOGRAPHIC FORMAT AS IT WOULD BE DISPLAYED FOR THE ERIC FILE.

TRY THE COMMAND STRING YOU WOULD NEED TO SEE THE ABSTRACT FOR THIS DOCUMENT.
?>T 3/4/7
+ THAT'S RIGHT. +

IF YOU WERE SEARCHING NTIS, SELECTED "PLATE TECTONICS", AND WANTED TO SEE JUST THE TITLE OF ITEM 1 IN SET 7, WHAT WOULD THE BEST COMMAND BE?
?>T 7/6/1

VEMA FRACTURE ZONE TRANSFORM FAULT.

4 ENDING A DIALOG SEARCH

Take a moment to review the commands BEGINn and .FILEn paying attention to the effects they have on your previous search history. See pages 6 and 50 in the Dialog Guide and/or page 12 in the Trainer Manual.

If you wanted to make a search in both ERIC and NTIS, without losing your current search history, what command would you use to get from ERIC to NTIS?
?>

,\,\.FILE6
Excellent,!
This saves your previous search histories for further reference.

The other two ways to end a search are the commands END and LOGOFF. They both give a summary of search events and an estimate of cost. END is misleading because it doesn't change files, or end anything; it just summarizes your activity for you. LOGOFF does exactly what it says. Try it.

```
?>LOGOFF
      13   AUG 77     9:09:50  User 316
    $0.28    0.0004 HOURS in File 34
   LOGOFF  09:09:56
```

All four of these commands (FILEn, .BEGINn, END, and LOGOFF) finalize any PRINT commands; that is, you CANNOT cancel with PRINT- the PRINTs you have ordered.

You can either go on to the materials on another system by typing the system name, or, if you are finished, type DONE.

Type the name of the system you want to work with, or type DONE:

U S DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

TRAINER

A Textual Representation

Section B: ORBIT

BEST COPY AVAILABLE

Contents:

Foreward i-iv

Detailed listing of contents of transcripts v-viii

This material is based upon work supported by the National Science Foundation, Grants DSI 76-09538 and 77-26525

Any opinions, findings, and conclusions or recommendations expressed in this publication are those of the author(s) and do not necessarily reflect the views of the National Science Foundation.

Copyright © 1979 Elaine Caruso

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Elaine Caruso

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

IR007892

TRAINER: A Textual Representation

TRAINER is very difficult to present in printed form. It is an activity, not a text. Its textual content can only be represented by examples; the organization of the content varies with every use, depending upon Trainee choices and responses.

The Computer Assisted Learning Modules

The contents of the tutorial modules, as they appear on the Trainee's terminal, vary, of course, depending on Trainee responses. In this text an attempt is made to present all contents in two modes:

first, as if the Trainee were completely unprepared, not having read the TRAINER Manual, nor even having the Mini-Manual at hand;

second, as if the Trainee were simply reviewing to fix his learning, or to refresh it, after an interval of disuse.

DIALOG and ORBIT Emulator Modules

The emulator modules are even more difficult of representation than the tutorial modules. The best approach here is to consider the emulators to be languages; the vocabularies of the languages are given on the following three pages. Examples of Trainee use of the emulators are interspersed with the tutorial modules to show their expected use as the Trainee develops increasing skills.

This text is divided into two sections:

Section A: DIALOG segments of Computer Assisted Learning and Practice (CALP) Modules and use of Module A, DIALOG emulator;

Section B: ORBIT segments of CALP Modules and use of Module B, ORBIT emulator.

This is Section B: ORBIT

EMULATORS ONLINE COMMANDS*

FUNCTIONS	DIALOG	ORBIT
(1) HOUSEKEEPING		
Starting search after login	BEGIN B ! (use with or without file number)	(Entry of any search statement or term or any command "expected" by ORBIT)
Terminating search Disconnecting from system	END = LOGOFF	STOP
Asking for list of accessible data base files	BEGIN (without file no.) ?FILES	FILES?
Elapsed time/cost	.COST (gives elapsed time and cost)	Elapsed time given at file change and end of search
Deleting search statements no longer needed	(BEGIN or BEGINn erases work done to that point)	(Not implemented) (FILE name, i.e., changing files erases previous work)
(2) SEARCHING		
Entering search terms	SELECT S # (with words, E numbers, range of E numbers)	(If entry is not a command word, it is assumed to be a search term) FIND FD
Displaying alphabetical list of terms	EXPAND E " (no thesaurus access) PAGE P	NBR (with UP and DOWN option, incl. default to DOWN)
Creating search logic	COMBINE C $ (use set numbers with AND, OR, NOT (*,+,-) operators) shortcut C1-3/+	(Usually in search mode; use AND, OR, AND NOT operators with terms or set numbers)
Changing data base files	BEGIN_____ (insert file no.) .FILE_____ (insert file no.)	FILE_____(insert file name)
Root searching	TERM? (any number of characters to right of term)	TERM: (any number of characters to right of term) with, without ALL
	THEAT?? ? (maximum number of characters to right of term)	THEAT## (specific number of characters to right of term)
Character substitution	WOM?N (one character embedded in term)	WOM#N (one character embedded in term)
	TETRA???ORIDE (specify number of characters embedded in term)	TETRA###ORIDE (specify number of characters embedded in term)
	(Not available on LRS DIALOG)	LABO:R (any number of characters embedded in term)
Restricting searches	By author (AU=) and title(/TI) fields	By author (/AU) and title (/TI) and index word (IW) and index term (IT) fields

*after Lawrence, Prewitt, Bearman, "User's Quick Guide," NFAIS, Philadelphia, March 1977 (see List of Useful Training Documents, Appendix 2)

FUNCTIONS	DIALOG	ORBIT
(3) OUTPUT		
Online printing	TYPE T ' (for printing terminals)	PRINT PRT
Formatting printout	Up to 10 defined formats for each file--see file descriptions	3 defined formats: default, FULL, TRIAL, or user defines by specifying field(s) to be printed
Specifying items to be printed	Specify set number, (format), sequence number of item or range of item numbers. Some default options as LRS' DIALOG	Specify set number, number (i.e., quantity) of items. Same default option as SDC's ORBIT SKIP
Offline printing	PRINT PR & (used as TYPE, above) PRINT-(print cancel)	PRINT OFFLINE (used as PRINT, above)
Interrupting online output	Available, but different from DIALOG: use(control key)-O	Available, but different from ORBIT: use (control key)-O
(4) SUPPORT FEATURES		
Erasing whole lines (errors) before transmitting	Available, but different Use (control key)-U	$ and Carriage Return
Erasing single character errors of input	(Delete key)	(Delete key)
Explanation	EXPLAIN (refers trainee to CALP modules)	EXPLAIN (refers trainee to CALP modules)
Providing description of search	DISPLAY SETS DS @	HISTORY (displays list of search statements, with all ORBIT options, e.g., range: HISTORY 6-10)
Assistance on procedures	Computer Assisted Learning Modules, and local phone, WATS line	Computer Assisted Learning Modules, and local phone, WATS line

Commands not implemented on TRAINER emulators include:

1. Housekeeping

   For DIALOG, none; for ORBIT: TIME, TIME INTERVAL, TIME RESET

2. Searching:

   For DIALOG:

   Viewing thesauri: EXPAND(WORD)
   Text searching: (W), (nW), (F), (C), (L), (S)
   Stacking commands
   Saving search strategies: END/SAVE, .RECALL, .EXECUTE, END/SDI, .RELEASE
   Restricting searches: LIMIT, LIMITALL, range searching, field qualifiers except AU=, /TI
   Range searching: :(colon)

   For ORBIT:

   Deleting search statements: ERASEALL, BACKUP, RESTART
   Text searching: STRINGSEARCH, SENSEARCH
   Stacking commands
   Saving search strategies: KEEP, SAVE, SAVE CANCEL, DELETE, SAVEOLD
   Creating search logic: SUBHEADINGS, SUBS
   Restricting searches: all except /AU, /IW, /TI, /IT

3. Output

   For DIALOG:

   Online display: DISPLAY D
   Sorting: .SORT

   For ORBIT:

   Sorting: SORT

4. Support Features

   For DIALOG: ?NEWS (TRAINER News goes out in opening CALP Modules), DISPLAY SETSn

   For ORBIT: NEWS, HELP, COMMENT, ORDER, RENAME SECURITY, VERSION, TERMINAL

CONTENTS

Login to the University of Pittsburgh Computer System, bringing up TRAINER 1

Explanation of CALP 2

List (index) of TRAINER Modules 3

Use of EXIT option to close a TRAINER session, and instructions for online communication to Trainee manager 4

1 Module 1 Accessing the Pitt System and the Learning Modules
Beginning Trainee 5
Experienced Trainee 8

2 Module 2 Accessing DIALOG and ORBIT through Networks
TYMNET - DIALOG practice 10
TELENET - ORBIT practice 12

Comments Module 2

We use the TELENET system to illustrate access to the SDC computer, and TYMNET to practice accessing the LRS computer. It would be a simple matter to extend this module, using the same teaching strategy, to allow the Trainee to choose to access either DIALOG or ORBIT on either network.

Once the governing conditions of accessing DIALOG or ORBIT are given:

1. Network name, service to be accessed
2. Speed and mode of terminal
3. Service password

the Trainee is expected to proceed, using data as given by the Services, or a copy of that data in the TRAINER Manual. This reflects, realistically, the situation a new online searcher meets when he first uses an online service.

The practice session is also realistic; the Trainee interprets the network access instructions as best he can, and uses them. However, if he asks for HELP, he will be told what the entry should be. If he makes an error, the program attempts to tell him exactly what it is: the common errors are looked for: e.g., if he forgets to space properly in the TELENET address or if the diagonal is forgotten in the ORBIT LOGIN.

Contents

Module 3 Learning the Basic Commands

Page

. Choosing Module 3, and ORBIT 15
. List of commands to be practiced/learned, Use of HELP, FILES? 16
. FILE NTIS, NBR SPACE 17
. term entry, NBR, DOWN 5, (5) 18
. term AND term, PRINT TRIAL 19
. PRINT FULL OFFLINE, STOP, YES/NO 20
. Quick review of above 21
. Transfer to Module B, ORBIT emulator 24

Module B, ORBIT emulator, used following Module 3

. FILE NTIS, NBR, term entry 25
. NBR, term entry, logical OR and AND with SS numbers, PRT TRIAL 26
. PRT FULL, STOP, YES 27

Module 4 Database Features

Page

General Introductory Material
. Login and bringing TRAINER online Reference to source of file descriptions in Manual, use of author qualifier (ORBIT) 28
. Search on term from abstract field (ORBIT), Identifying author prefix (DIALOG) EAU= 29
. Choosing a file for access to title field 30

Use of ORBIT Database Features
. Entry of single word terms; multiword terms; use of AND to reconstruct multiword terms, reading file documentation for term qualifiers 31
. Use of AND with single word terms, reading file documentation, use of multiword descriptors without qualifier 32
. Use of /IW, TRAINER EXIT 33
. Quick review of above 34

Module B, ORBIT emulator, following Module 4

Q.1, p. 64 . Request tutorial, FILE NTIS, use of /TI, NBR 37
. Complex logic including truncated term, use of MM display to select non-sequential terms, PRT 38
Q.2, p. 64 . AND logic, PRT TRIAL, failed logical result, failed AND for 0 postings. 39
Q.4, p. 64 . Errors in command use, NBR on /AU field (Q.5, p. 64). 40
. PRT TRIAL 41
. $, STOP, YES K/F 42

Contents

Module 5 Negotiating Search Terms

Page

. Meaning of "search terms"; comparison of term selection and browsing commands 43
. NBR, UP/DOWN 44
. Value of NBR display 45
. Use of NBR display in constructing complex strategy 46
. SS explained, use of FIND 47
. Use of colon, of multimeaning display 48
. Internal and terminal character substitution, using # and : 49
. Quick review use of Module 5 50

Module B, ORBIT Emulator, following Module 5

. NBR on unqualified term, use of DOWN by default (Q.3, p.65) . . 55
. Use of truncation on /AU field to compare NBR and MM displays, PRT 56
. Attempt to use multiword term in NTIS search, PRT AU, TI 3 (Q. 4, p.65) 57
. TIME, FD (Q. 6,7, p.65) 58
. Use of #, :, STOP 59

Module 6 Using Logical Operators

Page

. Optional review of logical operators AND, OR, NOT 60
. Optional listing of ORBIT rules for use of logical operators 61
. HISTORY display, use of terms or SS numbers with AND, OR 62
. Use of HIS, HISTORY; use of multiple steps in strategy building, to control order of execution of logical operators 63
. More practice in complex strategies 64
. Quick review of above, TRAINER EXIT 65

Module B, ORBIT Emulator, following use of Module 6

. Trainee uses terminal as scratch pad--makes informal statement of complex question as memory aid; searches each substantive word separately 69
. Recognizes need for truncation, uses HIS to review results, begins logical combination 70
. Continues experimental logical combinations, concludes first parameter of original question 71
. Completes second parameter, prints results 72
. Tries to duplicate search from Module 5 73
. Determines that item wanted is not in file 74
. Use of TIME, FD time, PRT SS 18 TI 10, STOP 75

Contents

Module 7 Using Output Commands and Formats

	Page
. Use of PRINT, PRT; PRT TRIAL; with default option;	76
. PRT FULL	77
. PRT IT; specifying quantity; SKIP; AU, TI	78
. Specifying SS with fields; OFFLINE printing	79
. More practice in formatting, specifying output; STOP; YES/NO	80
. Suggestions for emulator practice; communication to TRAINER, EXIT	81
. Quick review of above	82

Module A, ORBIT Emulator, showing use of PRINT capabilities (follows Module 7)

. PRT FULL SKIP	86
. PRT	87
. PRT TRIAL SKIP	88

```
>ITT^C
^C

.^C

.I

>ITT DEC-1099/A 603.89 13:06:35 TTY3 SYSTEM 1217/1239

LOG 134057/120121
JOB 32 PITT DEC-1099/A 603.89 TTY3  FRI 6-APR-79 1306
SWORD:
LAST LOGIN: 6-APR-79 0031
ITS REMAINING: 56.0   UNITS USED: 17.2

.TTY FI 2

.R CTLYST


CATALYST/II

06 APR 1979      13 07 08.3

LESSON.SECTION[P,PN]:TRAINER
ARE YOU CARUSO     ? ( TYPE YES OR NO) >/T
DO YOU WANT TO SEE ANY MAIL? >Y




STI SERVICES TRAINER
====================

COMPUTER ASSISTED LEARNING AND PRACTICE MODULES



TYPE IN THE NUMBER OF THE MODULE (1 THRU 7), OR
THE LETTER OF THE EMULATOR (A OR B), OR
L TO SEE THE LIST OF MODULES AND EMULATORS, OR
E FOR AN EXPLANATION:
```

>E

These CALP (Computer-Assisted Learning and Practice) sequences are designed to let you to practice online bibliographic searching in a real computer environment. This environment, though "real", is more tutorial than would be economical in a true search service system; your responses will be more closely analyzed, and you will receive more specific error messages when your commands are not correctly entered.

Frequently, throughout these lessons, you will be expected to type in responses. When a response is expected from you, the system will type a prompt character. The character is >. Type in your response after this character and then hit the RETURN key <CR>. You must hit <CR> after every response.

Note that the CALP Modules are selected by number and the Emulators by letter. The numbers and letters are for convenience and not necessarily a suggested order. You may do them in any order you like and may repeat as often as you wish.

If at any time you DO NOT know what sort of response is expected, hit <CR>.

You may terminate a session at any time by typing EXIT.

Type one of the following:
Module number
Emulator letter
L to see the list of modules and emulators
EXIT to return to the system monitor (and logoff using K/F)
>L

LESSON MODULES AND EMULATORS CURRENTLY IN THE PACKAGE INCLUDE:

1. ACCESSING THE PITT SYSTEM AND THE LEARNING MODULES	IF YOU KNOW HOW TO LOG IN SKIP THIS.
2. ACCESSING DIALOG AND ORBIT THROUGH NETWORKS	TO LEARN AND PRACTICE TYMNET AND TELENET PROCEDURES
3. LEARNING THE BASIC COMMANDS	A DIRECTED PRACTICE USE OF ALL THE BASIC COMMANDS (DIALOG AND/OR ORBIT)
4. DATABASE FEATURES	PROGRAMMED INSTRUCTION IN USE OF FIELD QUALIFIERS IN ENTERING SEARCH TERMS
5. NEGOTIATING SEARCH TERMS	PROGRAMMED INSTRUCTION IN SELECTION OF INDEX TERMS
6. USING LOGICAL OPERATORS	PROGRAMMED INSTRUCTION IN COMBINING TERMS TO BROADEN OR NARROW A SEARCH
7. USING OUTPUT COMMANDS AND FORMATS	PROGRAMMED INSTRUCTION IN USE OF PRINT AND TYPE COMMANDS
A. DIALOG	EMULATED SYSTEM WHICH ALLOWS PRACTICE OF COMMANDS AND TECHNIQUES LEARNED IN THE CALP MODULES
B. ORBIT	" " " "

TO GO TO ANY ONE OF THESE LESSON MODULES IMMEDIATELY, TYPE THE MODULE NUMBER OR THE EMULATOR LETTER (FROM THE LISTING).

```
TYPE ONE OF THE FOLLOWING:
MODULE NUMBER
EMULATOR LETTER
L TO SEE THE LIST OF MODULES AND EMULATORS
EXIT TO RETURN TO THE SYSTEM MONITOR (AND LOGOFF USING K/F)
>EXIT

IF YOU HAVE ANY QUESTIONS, COMMENTS, PROBLEMS:
AFTER THE MONITOR PROMPT (.) TYPE R MAIL AND FOLLOW THIS FORM:
 .R MAIL
TO:134057,120121
YOUR MESSAGE ENDING WITH CONTROL Z (↑Z)
TO:↑Z (USE ↑Z AFTER THE SECOND TO: TO EXIT FROM THE MAIL PROGRAM.)

YOU CAN RETRIEVE YOUR ANSWER BY RUNNING THE MAIL PROGRAM
AGAIN THE NEXT DAY.


TOTAL ELAPSED TIME FOR THIS LESSON IS 0:14:31.6


EXIT

.




UP STI.USE
17, "[134057,174671]GORDON        02 APR 1979 18 22 58.4 CALP ENTRY"
>$TO$
 17, "[134057,174671]GORDON      .  2 APR 1979 19 09 06.3 DIALOG    EXIT "
>K/F
>
?>$TY
K/F
>$DE
 17, "[134057,174671]GORDON      .  2 APR 1979 19 09 06.3 DIALOG    EXIT "
>↑C

.K/F
JOB 32 [134057,120121] OFF TTY3    AT 1322 6-APR-79  CONNECT=17 MIN
DISK R+W=446+56  TAPE IO=0  SAVED ALL FILES (2130 BLOCKS)
CPU 0:09  CORE HWM=12P  UNITS=0.0596 ($4.47)
```

>1

MODULE 1 -- ACCESSING THE PITT SYSTEM AND THE LEARNING MODULES
==========

SINCE YOU ARE OPERATING THIS PACKAGE ON THE UNIVERSITY OF PITTSBURGH'S COMPUTER SYSTEM, YOU WILL HAVE TO "LOGIN" TO THE SYSTEM THE NEXT TIME THAT YOU WANT TO HAVE A TRAINING SESSION. (IF THIS PRACTICE IS NOT NEEDED, TYPE EXIT.)

WE WILL GO THROUGH A DEMONSTRATION OF THE LOGIN PROCEDURE (WHICH IS DESCRIBED IN DETAIL IN YOUR MANUAL). ASSUME THAT YOUR USAGE NUMBER IS 123456,654321 AND THAT YOUR PASSWORD IS MYWORD .

PROCEED WITH YOUR LOGIN, BEGINNING WITH THE 'I' COMMAND:
(IF YOU ARE USING A DIAL-UP TERMINAL THE APPROPRIATE COMMAND IS <CONTROL KEY>C (↑C), BUT DO NOT PRACTICE IT HERE OR IT WILL ABORT THIS PROGRAM.)

.>HELP

+ YOU SHOULD TYPE IN ONLY AN I AND HIT THE RETURN (OR CR). +
+ (↑C IS ALSO ACCEPTABLE ON THE SYSTEM, BUT NOT IN THIS LESSON.) +

.>I

PITT DEC-1099/B 603.19 13 10 46 TTY141 SYSTEM 1240/1237
PLEASE LOGIN OR ATTACH

.>HELP

+ REPEAT THE IDENTIFYING MESSAGE THE SYSTEM JUST PRINTED. +

+ YOUR TERMINAL IS ATTACHED TO SYSTEM B AND YOU MUST USE ONLY +
+ SYSTEM A. USE THE TTY SYS A COMMAND TO SWITCH TO SYSTEM A. +

.>TT SY A

PITT DEC-1099/A 603.19 13 11 07 TTY141 SYSTEM 1217/1239
PLEASE LOGIN OR ATTACH

.>HELP

+ YOUR ENTRY SHOULD BE LOG 123456/654321 +

.>LOG 123456654321

+ YOUR ENTRY SHOULD BE LOG 123456/654321 +

```
. LOG 123456/654321
JOB 19 PITT DEC-1099/A 603.19 TTY141
PASSWORD:/

+     YOUR ENTRY MUST BE   MYWORD . REMEMBER, SINCE THE PASSWORD       +
+     IS A "SECRET CODE", IT DOES NOT PRINT ON YOUR TERMINAL WHEN      +
+     YOU TYPE IT.                                                     +

PASSWORD:>

LAST LOGIN: 28-NOV-78 0223
UNITS REMAINING: 4.4   UNITS USED: 27.2


.>HELP

+      YOU SHOULD NOW TYPE R CTLYST                                    +

.>R CTLYST

+     GOOD, NOW TRY THE LOGIN AGAIN. THIS TIME, HOWEVER,               +
+     EXACTLY AS IT WOULD BE WITHOUT EXTRA FEEDBACK.                   +

.>LOG 123456/654321

+     REMEMBER TO TYPE I FIRST. TRY AGAIN:                             +

.>I
PITT DEC-1099/A 603.19 13 12 38  TTY25
PLEASE LOGIN OR ATTACH

.>TTY SY A
PITT DEC-1099/A 603.19 13 12 44  TTY25
PLEASE LOGIN OR ATTACH

.>LOG 123456,654321
JOB 29  PITT DEC-1099/A  603.19  TTY25
PASSWORD:>

LAST LOGIN: 28-NOV-78 0223
UNITS REMAINING: 4.4   UNITS USED: 27.7


.>HELP

 ?FILE NOT FOUND

+     YOU MUST NOW TYPE    R CTLYST                                    +

.>R CTLYSTT

 ?FILE NOT FOUND

+     YOU MUST NOW TYPE    R CTLYST                                    +

.>R CTLYST

CATALYST/II

"06 APR 1979     13 13 31"
```

```
LESSON.SECTION[P,PN]:>HELP

+     BE CAREFUL! ON THE COMPUTER, CAPITAL O                          +
+     IS DIFFERENT FROM THE NUMBER 0 AND THE                          +
+     LETTER L CANNOT SUBSTITUTE FOR THE NUMBER 1.                    +


+     YOU MUST TYPE TRAINER[134057,120121]                            +

LESSON.SECTION[P,PN]:>TRAINER(123456,654321)

+     YOU MUST TYPE TRAINER[134057,120121]                            +

LESSON.SECTION[P,PN]:>TRAINER[134057,120121]

  .... AND YOU'RE IN THE TRAINING SESSION.


+     YOU MAY TERMINATE A CALP MODULE ANYTIME YOU WISH BY TYPING      +
+     EXIT WHEN A RESPONSE IS REQUESTED. THIS WILL TAKE YOU BACK TO   +
+     THE TABLE OF CONTENTS WHERE YOU MAY SELECT ANOTHER MODULE OR    +
+     AN EMULATOR OR EXIT FROM THE CALP PACKAGE.                      +

+     THE PROCEDURE FOR LOGOFF IS DESCRIBED IN YOUR MANUAL P.1-2.     +
+     ASK THE SYSTEM TO KILL YOUR JOB:                                +

.>HELP

+     NO, YOU SHOULD TYPE EITHER K/F OR KJOB/F.                       +

.>K/F
JOB 19 [123456,654321] OFF TTY141 AT 13 14 06 APR 1979 CONNECT=21 MIN
SAVED ALL FILES (35 BLOCKS)
CPU 0:05  TAPEIO=0  CORE HWM=11P  UNITS=0.0139 ($1.04)


+     ONCE YOU HAVE RECEIVED SUCH A MESSAGE, YOU WILL KNOW THAT YOU   +
+     ARE OFF THE SYSTEM.  TURN OFF YOUR TERMINAL, AND, IF YOU ARE    +
+     ON A DIALUP, HANG UP YOUR PHONE.                                +


TYPE ONE OF THE FOLLOWING:
MODULE NUMBER
EMULATOR LETTER
L TO SEE THE LIST OF MODULES AND EMULATORS
EXIT TO RETURN TO THE SYSTEM MONITOR (AND LOGOFF USING K/F)
>1
```

MODULE 1 -- ACCESSING THE PITT SYSTEM AND THE LEARNING MODULES

Since you are operating this package on the University of Pittsburgh's computer system, you will have to "LOGIN" to the system the next time that you want to have a training session. (If this practice is not needed, type EXIT.)

We will go through a demonstration of the LOGIN procedure (which is described in detail in your manual). Assume that your usage number is 123456,654321 and that your PASSWORD is MYWORD .

Proceed with your LOGIN, beginning with the 'I' command:
(If you are using a dial-up terminal the appropriate command is <control key>C (↑C), but do not practice it here or it will abort this program.)

```
.>I

PITT DEC-1099/B 603.19 13 15 59 TTY141 system 1240/1237
Please LOGIN or ATTACH

.>TTY SYS A

PITT DEC-1099/A 603.19 13 16 07 TTY141 system 1217/1239
Please LOGIN or ATTACH

.>LOG 123456/654321
JOB 19 PITT DEC-1099/A 603.19 TTY141
PASSWORD:>

Last login: 28-Nov-78 0223
Units remaining: 4.4   Units used: 27.2


.>R CTLYST
```

```
+     Good, now try the LOGIN again. This time, however,              +
+     exactly as it would be without extra feedback.                  +
```

```
. I
PITT DEC-1099/A 603.19 13 16 41  TTY25
PLEASE LOGIN OR ATTACH

.>TTY 37 A
PITT DEC-1099/A 603.19 13 16 47  TTY25
PLEASE LOGIN OR ATTACH

.>LOG 123456/654321
JOB 29  PITT DEC-1099/A  603.19  TTY25
PASSWORD:>

LAST LOGIN: 28-NOV-78 0223
UNITS REMAINING: 4.4   UNITS USED: 27.7


.>R CTLYST

CATALYST/II

"06 APR 1979      13 17 12"

LESSON.SECTION[P,PN]:>TRAINER[134057,120121]

 .... AND YOU'RE IN THE TRAINING SESSION.


+    YOU MAY TERMINATE A CALP MODULE ANYTIME YOU WISH BY TYPING        +
+    EXIT WHEN A RESPONSE IS REQUESTED. THIS WILL TAKE YOU BACK TO     +
+    THE TABLE OF CONTENTS WHERE YOU MAY SELECT ANOTHER MODULE OR      +
+    AN EMULATOR OR EXIT FROM THE CALP PACKAGE.                        +

+    THE PROCEDURE FOR LOGOFF IS DESCRIBED IN YOUR MANUAL P.1-2.       +
+    ASK THE SYSTEM TO KILL YOUR JOB:                                  +

.>2

+    NO, YOU SHOULD TYPE EITHER K/F OR KJOB/F.                         +

.>K/F
JOB 19 [123456,654321] OFF TTY141 AT 13 18 06 APR 1979 CONNECT=21 MIN
SAVED ALL FILES (35 BLOCKS)
CPU 0:05  TAPEIO=0  CORE HWM=11P  UNITS=0.0139 ($1.04)


+    ONCE YOU HAVE RECEIVED SUCH A MESSAGE, YOU WILL KNOW THAT YOU     +
+    ARE OFF THE SYSTEM.  TURN OFF YOUR TERMINAL, AND, IF YOU ARE      +
+    ON A DIALUP, HANG UP YOUR PHONE.                                  +


TYPE ONE OF THE FOLLOWING:
MODULE NUMBER
EMULATOR LETTER
L TO SEE THE LIST OF MODULES AND EMULATORS
EXIT TO RETURN TO THE SYSTEM MONITOR (AND LOGOFF USING K/F)
>2
```

MODULE 2 -- ACCESSING DIALOG AND ORBIT THROUGH NETWORKS
==========

In this module you can practice accessing a Search Service using the TYMNET and TELENET networks. The steps covered are:

1. Turn on the terminal; dial the Network telephone number; and place the phone handset in the acoustic coupler.
2. Identify your terminal to the Network Computer.
3. Tell the network computer which Search Service you want to use.
4. Identify yourself to the Search Service computer.

Refer to the Trainer Manual, p.5-8, or DIALOG and/or ORBIT Guides.

Type TYMNET or TELENET for access practice or type DONE.
>TYMNET
--- TYMNET Practice ---

\+ SITUATION: You have dialed into TYMNET and have placed your handset in the acoustic coupler. You are using a 30 cps PRINTING terminal in FULL duplex mode. Proceed to access DIALOG with MYWORD as your DIALOG password: +

PLEASE TYPE YOUR TERMINAL IDENTIFIER>

\+ In this situation, E is appropriate. +
\+ Note that this entry does not print on your terminal. +

PLEASE TYPE YOUR TERMINAL IDENTIFIER>

\+ In this situation, E is appropriate. +
\+ Note that this entry does not print on your terminal. +

PLEASE TYPE YOUR TERMINAL IDENTIFIER>

-1072-03--
PLEASE LOG IN:>HELP

Enter LRS for DIALOG (Lockheed Retrieval System).

-1072-03--
PLEASE LOG IN:>LRS

PASSWORD:>

Enter DIALOG to identify the Search Service.
Note: network suppresses online printing--DIALOG is considered to be a secret password.

```
PASSWORD:>

TC>  HOST IS ONLINE


ENTER YOUR DIALOG PASSWORD:
■■■■■■■■■
          LOGON FILE1  06 APR 1979  13 20 15


 ?
        ... AND YOU'RE INTO DIALOG.


        TYPE TYMNET OR TELENET FOR ACCESS PRACTICE OR TYPE DONE.
>TYMNET
---  TYMNET PRACTICE  ---

+       SITUATION:  YOU HAVE DIALED INTO TYMNET AND HAVE PLACED      +
+       YOUR HANDSET IN THE ACOUSTIC COUPLER.  YOU ARE USING A       +
+       30 CPS PRINTING TERMINAL IN FULL DUPLEX MODE.  PROCEED       +
+       TO ACCESS DIALOG WITH MYWORD AS YOUR DIALOG PASSWORD:        +

PLEASE TYPE YOUR TERMINAL IDENTIFIER>

-1072-03--
PLEASE LOG IN:>LRS:DIALOG

TC>  HOST IS ONLINE


ENTER YOUR DIALOG PASSWORD:
■■■■■■■■
BAD PASSWORD 13 21 00

ENTER YOUR DIALOG PASSWORD:
■■■■■■■■
          LOGON FILE1  06 APR 1979  13 21 08


 ?
        ... AND YOU'RE INTO DIALOG.


        TYPE TYMNET OR TELENET FOR ACCESS PRACTICE OR TYPE DONE.
>DONE
```

STI SERVICES TRAINER
====================

COMPUTER ASSISTED LEARNING AND PRACTICE MODULES

TYPE IN THE NUMBER OF THE MODULE (1 THRU 7), OR
THE LETTER OF THE EMULATOR (A OR B), OR
L TO SEE THE LIST OF MODULES AND EMULATORS, OR
E FOR AN EXPLANATION:

>2

MODULE 2 -- ACCESSING THE COMMUNICATIONS NETWORK
==

IN THIS MODULE YOU CAN PRACTICE ACCESSING A SEARCH SERVICE USING THE TYMNET AND TELENET NETWORKS. THE STEPS COVERED ARE:

1. TURN ON THE TERMINAL, DIAL THE NETWORK TELEPHONE NUMBER, AND PLACE THE PHONE HANDSET IN THE ACOUSTIC COUPLER.
2. IDENTIFY YOUR TERMINAL TO THE NETWORK COMPUTER.
3. TELL THE NETWORK COMPUTER WHICH SEARCH SERVICE YOU WANT TO USE.
4. IDENTIFY YOURSELF TO THE SEARCH SERVICE COMPUTER.

REFER TO THE TRAINER MANUAL, P.5-8, OR DIALOG AND/OR ORBIT GUIDES.

```
        TYPE TYMNET OR TELENET FOR ACCESS PRACTICE OR TYPE DONE.
>TELENET
---  TELENET PRACTICE  ---

+        SITUATION:  YOU HAVE DIALED INTO TELENET AND HAVE PLACED     +
+       YOUR HANDSET IN THE ACOUSTIC COUPLER.  YOU ARE USING A        +
+       30 CPS PRINTING TERMINAL IN FULL DUPLEX MODE.  PROCEED        +
+       TO ACCESS ORBIT WITH MYWORD AS YOUR USERID:

>
>
TELENET
412 DJ3

TERMINAL=>

 @ >C 21333

       YOU GOT THE RIGHT CHARACTERS; BUT SPACING IS IMPORTANT HERE.
       TRY AGAIN.


 @ >C 213 33


213 33L CONNECTED
>/LOGIN

      AT THIS POINT YOU ARE IN COMMUNICATION WITH THE SDC COMPUTER.
      NOW YOU SHOULD LOG IN.



213 33L CONNECTED
>LOGIN MYWORD

      TRY /LOGIN MYWORD
      THE CHARACTER / IS PART OF YOUR ENTRY AND MUST BE TYPED.



213 33L CONNECTED
>/LOGIN MYWORD

HELLO FROM SDC/ORBIT ...

        ... AND YOU'RE INTO ORBIT.
```

```
        TYPE TYMNET OR TELENET FOR ACCESS PRACTICE OR TYPE DONE.
>TELENET
---  TELENET PRACTICE  ---

+        SITUATION:  YOU HAVE DIALED INTO TELENET AND HAVE PLACED     +
+        YOUR HANDSET IN THE ACOUSTIC COUPLER.  YOU ARE USING A       +
+        30 CPS PRINTING TERMINAL IN FULL DUPLEX MODE.  PROCEED       +
+        TO ACCESS ORBIT WITH MYWORD AS YOUR USERID:

>
>
TELENET
412 DJ3

TERMINAL=>

 @ >C 213 33


213 33L CONNECTED
>/LOGIN MYWORD

HELLO FROM SDC/ORBIT ...

        ... AND YOU'RE INTO ORBIT.


        TYPE TYMNET OR TELENET FOR ACCESS PRACTICE OR TYPE DONE.
>DONE

TYPE ONE OF THE FOLLOWING:
MODULE NUMBER
EMULATOR LETTER
L TO SEE THE LIST OF MODULES AND EMULATORS
EXIT TO RETURN TO THE SYSTEM MONITOR (AND LOGOFF USING K/F)
>A
```

STI SERVICES TRAINER
==========

COMPUTER ASSISTED LEARNING AND PRACTICE MODULES

TYPE IN THE NUMBER OF THE MODULE (1 THRU 7), OR
THE LETTER OF THE EMULATOR (A OR B), OR
L TO SEE THE LIST OF MODULES AND EMULATORS, OR
E FOR AN EXPLANATION:

>3

MODULE 3 -- LEARNING THE BASIC COMMANDS
==========

THIS MODULE IS CONCERNED WITH THE BASICS OF SEARCHING THE ONLINE STI SYSTEMS. PRACTICE IN DOING A SIMPLE SEARCH IS INCLUDED.

PLEASE SELECT A SYSTEM FROM THE LIST BELOW OR TYPE DONE.

DIALOG
ORBIT
SCORPIO (NOT CURRENTLY AVAILABLE)

>ORBIT

--- ORBIT PRACTICE ---

THIS MODULE PROVIDES PRACTICE FOR CONDUCTING A SIMPLE SEARCH WITH THE BASIC ORBIT OPERATIONS. THEY ARE LISTED IN THE ORDER IN WHICH THEY ARE COMMONLY USED AND IN WHICH THEY ARE TO BE PRACTICED:

FILES?
FILE
NEIGHBOR OR NBR
UP OR DOWN
FIND OR FD
LOGICAL COMBINATION
PRINT
STOP

ANY TIME YOU ARE NOT SURE OF WHAT STEP IS NEXT IN THE PRACTICE, EITHER TYPE HELP OR JUST DO NOTHING (IN 60 SECONDS THE PROGRAM WILL AUTOMATICALLY GIVE HELP. (TYPE EXIT TO END A MODULE EARLY.)

+ SITUATION: YOU ARE LOGGED INTO ORBIT AND WISH TO DO A SEARCH ON SPACE STATION. YOU ARE USING A PRINTING TERMINAL. YOUR FIRST TASK IS TO GET THE FILE APPROPRIATE TO THE QUESTION. +

SS 1/C?
USER:
>HELP

+ THE APPROPRIATE STEP, IF YOU DON'T KNOW WHICH FILES ARE AVAILABLE, IS TO USE THE FILES? COMMAND TO OBTAIN A LIST OF CURRENTLY AVAILABLE FILES. +

SS 1/C?
USER:
>FILES

+ TYPE FILES? +

SS 1/C?
USER:
>FILES?

PROG:

YOU MAY ACCESS THE SSIE, CHEMCON, ERIC, NTIS, DEMO NTIS, AND POLLUTION DATA BASES.
YOU ARE NOW CONNECTED TO THE ORBIT DATABASE.

```
SS 1/C?
USER:
>HELP

+       SINCE YOU ARE SEARCHING FOR SPACE STATION, NTIS IS THE MOST  +
+       LIKELY FILE TO CONTAIN ITEMS ON SPACE STATIONS.  YOU NEED TO +
+       SWITCH FROM ERIC TO NTIS.  THE APPROPRIATE COMMAND IS        +
+       FILE NTIS                                                    +


SS 1/C?
USER:
>FILE ERIC

+       TYPE FILE NTIS                                               +


SS 1/C?
USER:
>FILE NTIS

PROG:
YOU ARE NOW CONNECTED TO THE NTIS DATABASE.

+       THE FIRST STEP IS TO SEE THE POSTINGS FOR SPACE.             +

SS 1/C?
USER:
>HELP

+       THE APPROPRIATE STEP IS TO SEE IF THE TERM SPACE IS IN THE   +
+       FILE.  TRY THE COMMAND   NBR SPACE                           +


SS 1/C?
USER:
>E SPACE

+       THE APPROPRIATE STEP IS TO SEE IF THE TERM SPACE IS IN THE   +
+       FILE.  TRY THE COMMAND   NBR SPACE                           +


SS 1/C?
USER:
>NBR SPACE

PROG:
POSTINGS          TERM
   422          SPA/BI
   232          SPACE/BI
  1303          SPACEBORNE/BI
    11          SPACES/TI
  1147          SPACING/BI

UP N OR DOWN N?
```

```
USER:
>5

+       JUST TYPE IN THE TERM SPACE TO SELECT.  (THE 11 ITEMS UNDER  +
+       SPACES ARE PROBABLY NOT RELEVANT IN THIS CONTEXT.)           +

SS 1/C?
USER:
>SPACES

PROG:
SS      1     PSTG(232)

+       SET 1 HAS 232 POSTINGS.  NOW CHECK OUT FOR STATION ALSO.     +

SS 2/C?
USER:
>HELP

+       NBR STATION WAS EXPECTED.                                    +
```

```
SS 2/C?
USER:
>NBR STATION

PROG:
POSTINGS        TERM
      1       STATION/BI
     36       STATIONARINESS/BI
    742       STATIONARY/BI
     95       STATIONED/IT
      3       STATIONEN/TI

UP N OR DOWN N?

+       SINCE THERE IS ONLY 1 POSTING FOR STATION, TRY GOING DOWN 5  +
+       TO CHECK FOR THE PLURAL.                                     +
USER:
>5

PROG:
POSTINGS        TERM
    104       STATIONERY/BI
     14       STATIONING/AB
    219       STATIONKEEPING/BI
      5       STATIONAIRE/TI
    387       STATIONS/BI

UP N OR DOWN N?
```

```
UP N OR DOWN N?

+       Now make a logical combination to get all items indexed by    +
+       both SPACE and STATIONS.                                      +


USER:
>SPACE OR STATIONS
+       Use AND to specify that the documents found MUST be indexed   +
+       by both SPACE AND STATIONS.                                   +

SS 3/C?
USER:
>SPACE AND STATIONS

PROG:
SS     2     PSTG(42)

+       The combined set shows 42 postings for SPACE AND STATIONS.    +
+       A good idea is to look at a few items to see if you have      +
+       what you want.  Use the PRINT TRIAL command to look at        +
+       the first 2 items.                                            +

SS 3/C?
USER:
>PR TRIAL
-1-
AN  - N77-32549/6SL
TI  - Nasa Workshop on Solar-Terrestrial Studies from a Manned Space
      Station
CC  - 04A; 55
IT  - *Atmospheric physics; *Measuring instruments; *Radiation effects;
      *Solar radiation; Conferences; Earth resources; Management
      methods; Microwaves; Space exploration; *Space stations
ST  - *Meetings; NTISNASA

-2-
AN  - N77-30154/7SL
TI  - Space Station Systems Analysis Study. Part 3:  Documentation.
      Volume 3: Appendixes. Book 2: Supporting Data
CC  - 22A; 22B; 84A; 84C
IT  - *Space stations; *Spacecraft environments; *Spacecraft modules;
      Systems analysis; Environmental control; Life support systems;
      Radiation effects; Spacecraft power supplies; Thermal resistance
ST  - NTISNASA


+       Since the trial items are generally acceptable, go ahead      +
+       and request a FULL OFFLINE PRINTOUT.                          +

SS 3/C?
USER:
>HELP

+       PRINT FULL OFFLINE was expected.                              +
```

```
SS 3/C?
USER:
>PRINT FULL OFF LINE

+       At this point, ORBIT will ask you to enter the Name and      +
+       Address of the person to receive the printout.  The          +
+       Requestor's Name (usually yours) and the Search Title are    +
+       also requested unless you have a previously stored address   +
+       and use the STORAD option.                                   +
+       ORBIT then asks "OK?" and if you respond "YES", ORBIT        +
+       continues:                                                   +

PROG:

OFFLINE PRINT COMPLETED

SS 3/C?
USER:
>HELP

+       Since you are now done for this search, the appropriate      +
+       command is STOP.                                             +


PROG:

OFFLINE PRINT COMPLETED

SS 3/C?
USER:
>STOP

PROG:
ALL DONE? (YES/NO)

USER:
>NO
+       If you change your mind after issuing a STOP command,       +
+       ORBIT goes right back to search mode.  This practice         +
+       sequence is concluded at this point, so type YES.            +

PROG:
ALL DONE? (YES/NO)

USER:
>YES

+       Now that you have practiced these ORBIT system operations,   +
+       you should be ready to try a sample search on the ORBIT      +
+       emulator.  See p. 11 of your Trainer Manual for suggested    +
+       questions for searches on the ORBIT emulator.                +
+       Repeat this module until you can use the commands            +
+       automatically.                                               +
```

PLEASE SELECT A SYSTEM FROM THE LIST BELOW OR TYPE DONE.

DIALOG
ORBIT
SCORPIO (NOT CURRENTLY AVAILABLE)

>ORBIT

--- ORBIT PRACTICE ---

THIS MODULE PROVIDES PRACTICE FOR CONDUCTING A SIMPLE SEARCH WITH THE BASIC ORBIT OPERATIONS. THEY ARE LISTED IN THE ORDER IN WHICH THEY ARE COMMONLY USED AND IN WHICH THEY ARE TO BE PRACTICED:

FILES?
FILE
NEIGHBOR OR NBR
UP OR DOWN
FIND OR FD
LOGICAL COMBINATION
PRINT
STOP

ANY TIME YOU ARE NOT SURE OF WHAT STEP IS NEXT IN THE PRACTICE, EITHER TYPE HELP OR JUST DO NOTHING (IN 60 SECONDS THE PROGRAM WILL AUTOMATICALLY GIVE HELP. (TYPE EXIT TO END A MODULE EARLY.)

+ SITUATION: YOU ARE LOGGED INTO ORBIT AND WISH TO DO A SEARCH ON SPACE STATION. YOU ARE USING A PRINTING TERMINAL. YOUR FIRST TASK IS TO GET THE FILE APPROPRIATE TO THE QUESTION. +

SS 1/C?
USER:
>FILE NTIS

PROG:
YOU ARE NOW CONNECTED TO THE NTIS DATABASE.

+ THE FIRST STEP IS TO SEE THE POSTINGS FOR SPACE. +

SS 1/C?
USER:
>SPACE

PROG:
SS 1 PSTG(232)

+ SET 1 HAS 232 POSTINGS. NOW CHECK OUT FOR STATION ALSO. +

```
SS 2/C?
USER:
>STATION

+       STATION AS THE SEARCH TERM IS PERMITTED AND IS APPROPRIATE    +
+       AT THIS POINT.  HOWEVER, USE NBR STATION INSTEAD, SO THAT     +
+       OTHER FEATURES OF ORBIT MAY BE REVIEWED.                      +


SS 2/C?
USER:
>NBR STATION

PROG:
POSTINGS      TERM
     1      STATION/BI
    36      STATIONARINESS/BI
   742      STATIONARY/BI
    95      STATIONED/IT
     3      STATIONEN/TI

UP N OR DOWN N?

+       SINCE THERE IS ONLY 1 POSTING FOR STATION, TRY GOING DOWN 5   +
+       TO CHECK FOR THE PLURAL.                                      +
USER:
>DOWN 5

PROG:
POSTINGS      TERM
   104      STATIONERY/BI
    14      STATIONING/AB
   219      STATIONKEEPING/BI
     5      STATIONAIRE/TI
   387      STATIONS/BI

UP N OR DOWN N?

+       NOW MAKE A LOGICAL COMBINATION TO GET ALL ITEMS INDEXED BY    +
+       BOTH SPACE AND STATIONS.                                      +


USER:
>STATIONS

PROG:
SS     2     PSTG(387)

+       SET 2 HAS 387 POSTINGS.  NOW YOU NEED TO COMBINE SETS         +
+       1 AND 2.                                                      +
```

```
SS 2/C?
USER:
>C 1 AND STATIONS

+     THIS IS ORBIT; DON'T USE THE DIALOG COMMAND C HERE.                +


SS 3/C?
USER:
>1 AND STATIONS

PROG:
SS      2      PSTG(42)

+       THE COMBINED SET SHOWS 42 POSTINGS FOR SPACE AND STATIONS.       +
+       A GOOD IDEA IS TO LOOK AT A FEW ITEMS TO SEE IF YOU HAVE         +
+       WHAT YOU WANT.  USE THE PRINT TRIAL COMMAND TO LOOK AT           +
+       THE FIRST 2 ITEMS.                                               +

SS 3/C?
USER:
>PRINT TRIAL
-1-
AN  - N77-32549/6SL
TI  - NASA WORKSHOP ON SOLAR-TERRESTRIAL STUDIES FROM A MANNED SPACE
      STATION
CC  - 04A; 55
IT  - *ATMOSPHERIC PHYSICS; *MEASURING INSTRUMENTS; *RADIATION EFFECTS;
      *SOLAR RADIATION; CONFERENCES; EARTH RESOURCES; MANAGEMENT
      METHODS; MICROWAVES; SPACE EXPLORATION; *SPACE STATIONS
ST  - *MEETINGS; NTISNASA

-2-
AN  - N77-30154/7SL
TI  - SPACE STATION SYSTEMS ANALYSIS STUDY. PART 3:  DOCUMENTATION.
      VOLUME 3: APPENDIXES. BOOK 2: SUPPORTING DATA
CC  - 22A; 22B; 84A; 84C
IT  - *SPACE STATIONS; *SPACECRAFT ENVIRONMENTS; *SPACECRAFT MODULES;
      SYSTEMS ANALYSIS; ENVIRONMENTAL CONTROL; LIFE SUPPORT SYSTEMS;
      RADIATION EFFECTS; SPACECRAFT POWER SUPPLIES; THERMAL RESISTANCE
ST  - NTISNASA


+       SINCE THE TRIAL ITEMS ARE GENERALLY ACCEPTABLE; GO AHEAD         +
+       AND REQUEST A FULL OFFLINE PRINTOUT.                             +

SS 3/C?
USER:
>PRINT FULL OFFLINE

+       AT THIS POINT; ORBIT WILL ASK YOU TO ENTER THE NAME AND          +
+       ADDRESS OF THE PERSON TO RECEIVE THE PRINTOUT.  THE              +
+       REQUESTOR'S NAME (USUALLY YOURS) AND THE SEARCH TITLE ARE        +
+       ALSO REQUESTED UNLESS YOU HAVE A PREVIOUSLY STORED ADDRESS       +
+       AND USE THE STORAD OPTION.                                       +
+       ORBIT THEN ASKS "OK?" AND IF YOU RESPOND "YES", ORBIT            +
+       CONTINUES!                                                       +

PROG:

OFFLINE PRINT COMPLETED
```

```
SS 3/C?
USER:
>STOP

PROG:
ALL DONE? (YES/NO)

USER:
>YES

+       NOW THAT YOU HAVE PRACTICED THESE ORBIT SYSTEM OPERATIONS,    +
+       YOU SHOULD BE READY TO TRY A SAMPLE SEARCH ON THE ORBIT      +
+       EMULATOR.  SEE P. 64 OF YOUR TRAINER MANUAL FOR SUGGESTED    +
+       QUESTIONS FOR SEARCHES ON THE ORBIT EMULATOR.                +
+       REPEAT THIS MODULE UNTIL YOU CAN USE THE COMMANDS            +
+       AUTOMATICALLY.                                               +


PLEASE SELECT A SYSTEM FROM THE LIST BELOW OR TYPE DONE.

        DIALOG
        ORBIT
        SCORPIO (NOT CURRENTLY AVAILABLE)

>DONE

TYPE ONE OF THE FOLLOWING:
MODULE NUMBER
EMULATOR LETTER
L TO SEE THE LIST OF MODULES AND EMULATORS
EXIT TO RETURN TO THE SYSTEM MONITOR (AND LOGOFF USING K/F)
>B


HELLO FROM PITT/ORBIT. (28-MAR-79  13:43 09.5  LOCAL TIME)
YOU ARE NOW CONNECTED TO THE NTIS                    DATABASE.

ARE YOU A NEW USER?  IF YES ENTER Y.  IF NO ENTER N OR A COMMAND.
```

```
FILE NTIS

PROG:
YOU ARE NOW CONNECTED TO THE NTIS                    DATABASE
SS  1/C?
USER:
>NBR HAZARDS

PROG:
POSTINGS     TERM
      1      HAYWARD, CHARLES/AU
      4      HAZARDOUS/BI
     10      HAZARDS/BI
      2      HE3/BI
      3      HEAD/BI
UP N OR DOWN N?
USER:
>HAZARDS

PROG:
SS  1 PSTGS (10)
SS  2/C?
USER:
>HAZARDOUS

PROG:
SS  2 PSTGS ( 4)
SS  3/C?
USER:
```

```
>NBR MICROWAVE

PROG:
POSTINGS     TERM
      2     MICROSCOPY/BI
      3     MICROSTRUCTURE/BI
     10     MICROWAVE/BI
      4     MICROWAVES/BI
      1     MIELE, A./AU
UP N OR DOWN N?
USER:
>MICROWAVE

PROG:
SS  3 PSTGS (10)
SS  4/C?
USER:
>MICROWAVES

PROG:
SS  4 PSTGS ( 4)
SS  5/C?
USER:
>1 OR 2

PROG:
SS  5 PSTGS (12)
SS  6/C?
USER:
>3 OR 4

PROG:
SS  6 PSTGS ( 7)
SS  7/C?
USER:
>5 AND 6

PROG:
SS  7 PSTGS ( 1)
SS  8/C?
USER:
>PRT TRIAL

PROG:

TI-  RADIATION HAZARDS.
DE-  IDENTIFIERS: MICROWAVE RADIOBIOLOGY, NTISDODSD
SS  8/C?
```

2/1

```
USER:
>PRT FULL

PROG:

AN-  C535315    FLD: 6R, 57V   GRAI7524
TI-  RADIATION HAZARDS.
DE-  IDENTIFIERS: MICROWAVE RADIOBIOLOGY, NTISDODSD
CA-  AD-A015 200/9ST   NTIS PRICES: PC$6.25/MF$2.25
PD-  AUG 75   155P
AB-  ABSTRACT:;CONTENTS: BIOLOGIC AND PATHOPHYSIOLOGIC EFFECTS OF EXPO
     SURE TO MICROWAVE OR ULTRASONIC ENERGY; PATHOPHYSIOLOGICAL ASPECT
     S OF EXPOSURE TO MICROWAVES; PHYISCAL ASPECTS - ULTRASOUND; BIOPH
     YSICS - ENERGY ABSORPTION AND DISTRIBUTION; ELECTROMAGNETIC RADIA
     TION: EFFECTS ON THE EYE; ENDOCRINE AND CENTRAL NERVOUS SYSTEM EF
     FECTS OF MICROWAVE EXPOSURE; MICROWAVE INDUCED ACOUSTIC EFFECTS I
     N MAMMALIAN AUDITORY SYSTEMS; BIOLOGICAL EFFECTS OF ULTRASOUND; E
     NGINEERING CONSIDERATIONS AND MEASUREMENTS; ELECTROMAGNETIC INTER
     FERENCE OF CARDIAC PACEMAKERS; ON EMP SAFETY HAZARDS; PROTECTION
     GUID
SS  8/C?
USER:
>STOP

PROG:
ALL DONE? (YES/NO)
USER:
>YES

PROG:
GOOD-BYE!
```

```
-----   END OF EMULATION OF ORBIT      -----

TYPE CAL TO RETURN TO THE CATALYST CAL MODULES;
TYPE K/F TO LOGOFF THE SYSTEM; OR
TYPE EXIT TO RETURN TO THE SYSTEM MONITOR:
```

STI SERVICES TRAINER
====================

COMPUTER ASSISTED LEARNING AND PRACTICE MODULES

TYPE IN THE NUMBER OF THE MODULE (1 THRU 7), OR
THE LETTER OF THE EMULATOR (A OR B), OR
L TO SEE THE LIST OF MODULES AND EMULATORS, OR
E FOR AN EXPLANATION:

>4

MODULE 4 -- DATABASE FEATURES
=============================

DATABASE AND FILE DESCRIPTIONS PROVIDED BY THE SEARCH SERVICES ARE NECESSARY IN PREPARING AN ONLINE SEARCH. HAVE THE DIALOG BRIEF GUIDE OR ORBIT QUICK REFERENCE GUIDE IN HAND WHENEVER YOU SEARCH ONLINE. THIS MODULE COMPARES DIALOG AND ORBIT PRACTICES. YOU WILL NEED YOUR TRAINING MANUAL FOR THIS MODULE (PP. 22-23).

IF YOU HAVE YOUR TRAINING MANUAL WITH YOU, TYPE GO; IF NOT, TYPE EXIT AND GET IT BEFORE YOU CONTINUE THIS MODULE.

>GO

LOOK AT THE DESCRIPTION OF THE NTIS FILE IN ORBIT'S QUICK REFERENCE GUIDE OR SEE TRAINER MANUAL P. 22.
ON ORBIT IN NTIS WHAT COULD YOU ENTER TO RETRIEVE THE AUTHOR LANDOLT?

SS 4/C?
USER:
>LANDOLT:/AU
RIGHT,!

TURN TO TABLE 1, P. 22, OF YOUR MANUAL.
NOTICE WHERE THE ORBIT SEARCHABLE FIELDS ON THE TWO FILES, ERIC AND NTIS, ARE TREATED DIFFERENTLY. NOTICE THAT YOU CAN SEARCH ON WORDS TAKEN FROM THE ABSTRACT (THEY ARE IN THE BASIC INDEX) WHEN USING ERIC, BUT THEY CANNOT BE SEARCHED FOR IN THE NTIS FILE.

NOTICE ALSO, FOR BOTH FILES, AUTHOR IS SEARCHABLE, BUT IT IS NOT IN THE BASIC INDEX, SO YOU MUST USE THE QUALIFIER, /AU.

JONES/AU

On ORBIT in ERIC, what would you type in to see the postings for the word FAITOUR which is found in a document abstract?

SS 1/C?
USER:
>S FAITOUR
+ ORBIT does not use a command word (S or SELECT or SEARCH) +
+ for entering a search term or for entering logical state- +
+ ments. Just enter the search term: FAITOUR

+ The abstract field is directly searchable, but as part +
+ of the Basic Index. Just type FAITOUR without a qualifier. +

SS 1/C?
USER:
>FAITOUR
Good!

Now look at Table 2 which shows the DIALOG conventions for ERIC and NTIS. Notice that the codes for NTIS and ERIC differ just as with ORBIT and, further, that there are two types of codes, Prefix and Suffix.

In DIALOG is "Author" a Prefix or a Suffix code?

>PRE
Good show there,!

How would you EXPAND Jones as an Author in DIALOG?

?>E AU=JONES?
Excellent!

Now a different question. Suppose you had only a word from the title of a document for which you need the full citation and are able to search either ORBIT or DIALOG. Which data base, ORBIT's or DIALOG's, would you use to search the NTIS file?

>O↑U
DIALOG
Right on!

+ This last question is much more important than it might seem. Remember, whenever you have two or more files and/or two or more search services (data bases) available which could provide you with the answers you need, you must always consider which is most useful. Study the file description. Can you
+ 1. restrict your search to the most specific useful field? or conversely,
+ 2. search all possibly useful fields with one command?

The systems represented on this training package are:
SCORPIO (not yet available in this module),
DIALOG,
and ORBIT.

Choose one of these systems now, so that you can learn a little more about how various database features are represented on that system. Once you have learned this material about one system, you may either look at similar information about another system by typing the system name, or end by typing DONE.

Type a system name or DONE.
>ORBIT

ORBIT

----- ORBIT PRACTICE -----

WHEN DOING SUBJECT TERM SEARCHES ON THE ORBIT SYSTEM, YOU CAN USUALLY ENTER THE SEARCH TERMS ONE OF TWO WAYS:

AS A MULTIWORD TERM, OR

AS A SINGLE WORD TERM.

SOME FILES IN THE ORBIT DATABASE ALLOW SEARCHING OF SINGLE WORDS DERIVED FROM MULTIWORD TERMS AND ALSO THE ORIGINAL MULTIWORD TERM. FOR THESE FILES, YOU CAN ENTER SUBJECT SEARCH TERMS EITHER WAY.

AS MULTIWORD SEARCH	AS SINGLE WORD SEARCH
SIMPLY ENTER THE MULTIWORD TERM	ENTER THE SINGLE WORDS OF THE PHRASE, LINKING THEM WITH AND
USER: SOLAR ENERGY	USER: SOLAR AND ENERGY
PROG: SS 1 PSTG(300).	PROG: SS 1 PSTG(343).

DO YOU SEE ANY DIFFERENCE IN THE RESULTING SETS?

>ONLY IN SIZE
NOTICE THAT THE SECOND EXAMPLE, SOLAR AND ENERGY, PICKED UP MORE POSTINGS THAN THE MULTIWORD ENTRY, SOLAR ENERGY. THIS HAPPENS BECAUSE THE SINGLE WORDS MAY HAVE BEEN DERIVED FROM OTHER CONTEXTS: SOLAR WINDS OR NUCLEAR ENERGY, FOR EXAMPLE.

THE ORBIT DATABASE INFORMATION FOR YOUR CHOSEN FILE WILL TELL YOU WHETHER MULTIWORD TERMS MAY BE USED, OR WHETHER ONLY SINGLE WORD TERMS CAN BE USED.

NOW LET'S TRY A FEW EXERCISES THAT INVOLVE INTERPRETATION OF THE ORBIT DATABASE INFORMATION FOR NTIS AND ERIC. YOU CAN FIND THIS INFORMATION IN THE TRAINER MANUAL, TABLE I, P. 23.

REFERRING TO THE NTIS-ORBIT INFORMATION, COULD WE CONDUCT A SEARCH ON THE INDEX TERM CATEGORY?
(ANSWER YES OR NO.)

>NO
+ THE TABLE SHOWS THAT A DIRECT SEARCH CAN BE CONDUCTED ON INDEX TERMS. +

HOWEVER, NOTICE THAT YOU CANNOT RESTRICT YOUR SEARCH TO THE INDEX TERM FIELD, BUT MUST SEARCH THE FULL BASIC INDEX OF SUBJECT FIELDS.

TRY USING THE TERM MANNED SPACE STATION AS A SEARCH ON THE NTIS FILE IN THE ORBIT INDEX TERM CATEGORY. ENTER THE TERM AS YOU WOULD FOR AN NTIS SEARCH.

```
SS  1/C?
USER:
>S MANNED SPACE STATION

+      ENTER MANNED AND SPACE AND STATION.  EACH OF THE SINGLE      +
       WORDS OF THE MULTIWORD TERM IS THUS LINKED BY THE LOGICAL    +
+      OPERATOR AND; AND YOU WILL RETRIEVE DOCUMENTS INDEXED BY      +
+      THE THREE TERMS.                                             +

SS  1/C?
USER:
>MANNED AND SPACE AND STATION
RIGHT!
```

NOW SUPPOSE THAT YOU WANTED TO SEARCH THE ERIC DATABASE ON THE INDEX TERM CATEGORY. COULD YOU CONDUCT SUCH A DIRECT SEARCH?

```
>YES
RIGHT ON!
```

TRY USING THE TERM EDUCATIONAL RESEARCH AS A SEARCH TERM. ENTER IT AS IF YOU WERE ENTERING AN ERIC DESCRIPTOR.

```
SS 1/C?
USER:
>EDUCSA+U
EDUCATIONAL RESEARCH/DE
+      THE /DE IS NOT NEEDED; SINCE MULTIWORD TERMS ARE             +
+       AUTOMATICALLY SEARCHED IN THE DESCRIPTOR INDEX.             +

SS 1/C?
USER:
>EDUCATIONAL RESEARCH
GOOD SHOW THERE;!
```

How could you request a search on the ERIC descriptor READING, so that you would not get hits on the index entry for READING when it was a single word entry which had been derived from some multi-word term; for example READING READINESS?

>READING/DE
+ Try READING/IW

>READING/IW
Correct!
  Although all of the above examples show procedures for entering search terms, the same rules apply when you use the N3R or FIND commands.

----- End of ORBIT Practice -----

You can now look at features of another search system, or type EXIT to choose another Module. Practice on Module 6, the ORBIT emulator is suggested. (See Trainer Manual, p.12-16.)

  Type a system name or DONE.
>DONE

Type one of the following:
Module number
Emulator letter
L to see the list of modules and emulators
EXIT to return to the system monitor (and logoff using K/F)
>EXIT

If you have any questions, comments, problems:
After the monitor prompt (.) type R MAIL and follow this form:
 .R MAIL
TO:134057,120121
your message ending with control Z (↑Z)
TO:↑Z (Use ↑Z after the second TO: to exit from the mail program.)

You can retrieve your answer by running the mail program again the next day.

Total elapsed time for this lesson is 0:5:33.7

EXIT

.K/F
Job 24 [134057,120121] off TTY16 at 1559 30-Mar-79 Connect=18 Min
Disk R+W=495+199 Tape IO=0 Saved all files (2436 blocks)
CPU 0:10 Core HWM=12P Units=0.0643 ($4.82)

----- ORBIT PRACTICE -----

WHEN DOING SUBJECT TERM SEARCHES ON THE ORBIT SYSTEM, YOU CAN USUALLY ENTER THE SEARCH TERMS ONE OF TWO WAYS:

AS A MULTIWORD TERM, OR

AS A SINGLE WORD TERM.

SOME FILES IN THE ORBIT DATABASE ALLOW SEARCHING OF SINGLE WORDS DERIVED FROM MULTIWORD TERMS AND ALSO THE ORIGINAL MULTIWORD TERM. FOR THESE FILES, YOU CAN ENTER SUBJECT SEARCH TERMS EITHER WAY.

AS MULTIWORD SEARCH	AS SINGLE WORD SEARCH
SIMPLY ENTER THE MULTIWORD TERM	ENTER THE SINGLE WORDS OF THE PHRASE, LINKING THEM WITH AND
USER: SOLAR ENERGY	USER: SOLAR AND ENERGY
PROG: SS 1 PST6(300).	PROG: SS 1 PST6(343).

DO YOU SEE ANY DIFFERENCE IN THE RESULTING SETS?

>YES SECOND IS LARGER

NOTICE THAT THE SECOND EXAMPLE, SOLAR AND ENERGY, PICKED UP MORE POSTINGS THAN THE MULTIWORD ENTRY, SOLAR ENERGY. THIS HAPPENS BECAUSE THE SINGLE WORDS MAY HAVE BEEN DERIVED FROM OTHER CONTEXTS: SOLAR WINDS OR NUCLEAR ENERGY, FOR EXAMPLE.

THE ORBIT DATABASE INFORMATION FOR YOUR CHOSEN FILE WILL TELL YOU WHETHER MULTIWORD TERMS MAY BE USED, OR WHETHER ONLY SINGLE WORD TERMS CAN BE USED.

Now let's try a few exercises that involve interpretation of the ORBIT database information for NTIS and ERIC. You can find this information in the TRAINER manual, Table I, p. 23.

Referring to the NTIS-ORBIT information, could we conduct a search on the Index Term category?
(Answer YES or NO.)

```
>NO
+       THE TABLE SHOWS THAT A DIRECT SEARCH CAN BE CONDUCTED ON      +
+       INDEX TERMS.                                                  +
```

However, notice that you cannot RESTRICT your search to the INDEX TERM field, but must search the Full BASIC Index of subject fields.

Try using the term MANNED SPACE STATION as a search on the NTIS file in the ORBIT Index Term category. Enter the term as you would for an NTIS search.

```
SS  1/C?
USER:
>MANNED

+      ENTER MANNED AND SPACE AND STATION.  EACH OF THE SINGLE       +
+     WORDS OF THE MULTIWORD TERM IS THUS LINKED BY THE LOGICAL      +
+     OPERATOR AND, AND YOU WILL RETRIEVE DOCUMENTS INDEXED BY       +
+     THE THREE TERMS.                                               +

SS  1/C?
USER:
>MANNED AND SPACE AND STATION
RIGHT!
```

Now suppose that you wanted to search the ERIC database on the Index Term category. Could you conduct such a direct search?

```
>YES
GOOD!
```

Try using the term EDUCATIONAL RESEARCH as a search term. Enter it as if you were entering an ERIC Descriptor.

```
SS 1/C?
USER:
>EDUCATIONAL AND RESEARCH/DE
+     THE /DE IS NOT NEEDED, SINCE MULTIWORD TERMS ARE               +
+     AUTOMATICALLY SEARCHED IN THE DESCRIPTOR INDEX.                +

SS 1/C?
USER:
>EDUCATIONAL RESEARCH
RIGHT,!
```

```
How could you request a search on the ERIC descriptor READING,
so that you would not get hits on the index entry for READING when
it was a single word entry which had been derived from some multi-
word term; for example READING READINESS?

>READING/DE
+    Try READING/IW

>READING/IW
Correct,!
     Although all of the above examples show procedures for
entering search terms, the same rules apply when you use the NBR
or FIND commands.

 ----- End of ORBIT Practice -----

You can now look at features of another search system, or type EXIT to
choose another Module. Practice on Module B, the ORBIT emulator is
suggested.  (See Trainer Manual, p.12-16.)

   Type a system name or DONE.
>DONE

Type one of the following:
Module number
Emulator letter
L to see the list of modules and emulators
EXIT to return to the system monitor (and logoff using K/F)
>EXIT

If you have any questions, comments, problems:
After the monitor prompt (.) type R MAIL and follow this form:
 .R MAIL
TO:134057,120121
your message ending with control Z (↑Z)
TO:↑Z (Use ↑Z after the second TO: to exit from the mail program.)

You can retrieve your answer by running the mail program
again the next day.
```

```
HELLO FROM PITT/ORBIT. (12-Apr-79  15:04 28.3  LOCAL TIME)
YOU ARE NOW CONNECTED TO THE NTIS                    DATABASE.

 FOR A TUTORIAL, ENTER A QUESTION MARK. OTHERWISE ENTER A COMMAND.

USER:
>?

PROG:

ON THIS SYSTEM YOU MUST RUN THE TRAINER MODULES.
OR A TRAINER TYPE STOP TO LOGOFF THE ORBIT EMULATOR.  THEN TYPE R CTLYST
>TRAINER[134057,120121]

USER:
>FILE NTIS

PROG:
YOU ARE NOW CONNECTED TO THE NTIS                    DATABASE
SS  1/C?
USER:
>NONIONIZING/TI

PROG:
NP (NONIONIZING                )
*NONE-
SS  1/C?
USER:
>RADIATION/TI

PROG:
NP (RADIATION                  )
*NONE-
SS  1/C?
USER:
>RADIATION

PROG:
SS  1 PSTGS (10)
SS  2/C?
USER:
>NBR NONIONIZING

PROG:
POSTINGS    TERM
     3    NONCOMMUTATIVE/BI
     4    NONDESTRUCTIVE/BI
     2    NONIONIZING/BI
     4    NONLETHAL/BI
    10    NONLINEAR/BI
UP N OR DOWN N?
USER:
>NONIONIZING/BI

PROG:
SS  2 PSTGS ( 2)
```

```
SS  3/C?
USER:
>RADIATION

PROG:
SS  3 PSTGS (10)
SS  4/C?
USER:
>2 AND 3 AND RAT:

PROG:
 MM (RAT:                    ) (  6)
                      1  RAT/BI
                      2  RATE/BI
                      3  RATES/BI
                      4  RATI/BI
                      5  RATIO/BI
                      6  RATS/BI
 SPECIFY NUMBERS, ALL, OR NONE
USER:
>1,6

PROG:
SS  4 PSTGS ( 1)
SS  5/C?
USER:
>PRT

PROG:

AN-  C535546    FLD: 6R, 57V    GRAI7524
TI-  EFFECTS OF LOW-LEVEL MICROWAVE RADIATION ON BEHAVIORAL BASELINES.

AU-  AUTHOR: THOMAS, JOHN R.; FINCH, EDWARD D.; FULK, DAVID W.; BURCH,
       LINDA S.
SO-  MEDICAL RESEARCH PROGRESS REPT.
PD-  1975   11P
SS  5/C?
USER:
>
```

```
SILICON AND CONDUCTIVITY

PROG:
SS  5 PSTGS ( 2)
SS  6/C?
USER:
>PRT TRIAL

PROG:

TI-  High Frequency Hot Electron Conductivity and Admittance in Si and
      Ge,
DE-  Identifiers: Equivalent circuits, Hot electrons, NTISDODXR, NTISD
     ODAF, NTISNSFG

TI-  High Frequency Hot Electron Conductivity and Admittance in Si and
      Ge,
DE-  Identifiers: Equivalent circuits, Hot electrons, NTISDODXR, NTISD
     ODAF, NTISNSFG
SS  6/C?
USER:
>MOTIVATION THEORY

PROG:
NP (MOTIVATION THEORY    )
*NONE-
SS  6/C?
USER:
>MOTIVATION AND THEORT\T\Y

PROG:
NP ([ LOGICAL RESULT ]  )
*NONE-
SS  6/C?
USER:
>MOTIVATION

PROG:
SS  6 PSTGS ( 5)
SS  7/C?
USER:
>THEORY

PROG:
SS  7 PSTGS (10)
SS  8/C?
USER:
>C6 AND 7

PROG:
NP (C6                  )
*NONE-
SS  8/C?
USER:
```

```
>

PROG:
COMMAND NOT SUPPORTED


SS  8/C?
USER:
>MACK, F:/AU

PROG:
NP (MACK, F:              )
*NONE-
SS  8/C?
USER:
>EAU=FAIT:

PROG:
NP (EAU=FAIT:             )
*NONE-
SS  8/C?
USER:
>NBR MACK/AU

PROG:
POSTINGS    TERM
      1     LUKINA, V. A./AU
      1     LUOMA, M. DAY/AU
      1     LYNCH, CORNELIUS/AU
      1     MACK, J. D./AU
      1     MADARIAGA, RAUL I/AU
MACK                  DOES NOT EXIST IN THE INDEX IN THIS FORM

UP N OR DOWN N?
USER:
>FIND TRANSITION AND TEMPERATURES

PROG:
NP ([ LOGICAL RESULT ]  )
*NONE-
SS  8/C?
USER:
>METALS

PROG:
SS  8 PSTGS ( 5)
SS  9/C?
USER:
>TRANSITION

PROG:
SS  9 PSTGS (10)
SS 10/C?
USER:
>C*U
8 AND 9

PROG:
SS 10 PSTGS ( 3)
```

```
SS 11/C?
USER:
>PRT TRIAL 3

PROG:

TI-  Superconducting Transition Temperature in Martensitic Titanium-Ba
     se Transition-Metal Binary Alloys,
DE-  Identifiers: Soft phonons, NTISDODXR, NTISDODAF

TI-  Superconducting Transition Temperature in Martensitic Titanium-Ba
     se Transition-Metal Binary Alloys,
DE-  Identifiers: Soft phonons, NTISDODXR, NTISDODAF

TI-  Superconducting Transition Temperature in Martensitic Titanium-Ba
     se Transition-Metal Binary Alloys,
DE-  Identifiers: Soft phonons, NTISDODXR, NTISDODAF
SS 11/C?
USER:
>FIND TRANSITION AND TEMPERATURE:

PROG:
 MM (TEMPERATURE:          ) (  2)
                    1  TEMPERATURE/BI
                    2  TEMPERATURES/BI
 SPECIFY NUMBERS, ALL, OR NONE
USER:
>A;\;\LL

PROG:
SS 11 PSTGS ( 2)
SS 12/C?
USER:
>PRT TRIAL

PROG:

TI-  Superconducting Transition Temperature in Martensitic Titanium-Ba
     se Transition-Metal Binary Alloys,
DE-  Identifiers: Soft phonons, NTISDODXR, NTISDODAF

TI-  The Pressure and Temperature Effects on Brittle to Ductile Transi
     tion in PS and PMMA,
DE-  Identifiers: Shear banding, NTISDODN
SS 12/C?
USER:
```

```
WEISS/AUSTO^\^\$

USER:
>STOP

PROG:
ALL DONE? (YES/NO)
USER:
>Y

PROG:
GOOD-BYE!

STOP

END OF EXECUTION    FOROTS 5B(772)
CPU TIME: 10.38 ELAPSED TIME: 21:22.53
EXIT

.K/F
JOB 78 [135113,360171] OFF TTY6    AT 1526 12-APR-79  CONNECT=24 MIN
DISK R+W=942+62  TAPE IO=0  SAVED ALL FILES (2778 BLOCKS)
CPU 0:11  CORE HWM=22P  UNITS=0.0777 ($5.82)
```

2.0

STI SERVICES TRAINER
====================

COMPUTER ASSISTED LEARNING AND PRACTICE MODULES

TYPE IN THE NUMBER OF THE MODULE (1 THRU 7), OR
THE LETTER OF THE EMULATOR (A OR B), OR
L TO SEE THE LIST OF MODULES AND EMULATORS, OR
E FOR AN EXPLANATION:

>5

MODULE 5 -- NEGOTIATING SEARCH TERMS
====================================

THE PROCESS OF EXPRESSING YOUR QUERY AS A LIST OR COMBINATION OF SPECIFIC WORDS OR "SEARCH TERMS" IS NOT EASY. NOT ONLY MUST YOUR CHOICE OF TERMS EXPRESS YOUR INFORMATION NEED COMPLETELY IN A SEMANTIC, CONCEPTUAL SENSE, BUT IT MUST ALSO MATCH, MECHANICALLY, LETTER FOR LETTER, THE WORDS STORED BY THE RETRIEVAL SYSTEM TO REPRESENT THE DOCUMENTS YOU NEED.

BELOW ARE THE COMMANDS THAT ALLOW BROWSING, TERM SELECTION, AND DISCOVERY OF CORRECT FORMS. THEY ARE LISTED FOR EACH SYSTEM REPRESENTED ON THIS TRAINING PACKAGE.

SYSTEM	COMMANDS
DIALOG	EXPAND OR E
	SELECT OR S
ORBIT	NEIGHBOR OR NBR
	(SS) OR FIND
SCORPIO	BRWS
	SLCT

TRY USING THESE COMMANDS AS IF YOU WERE SEARCHING THE ERIC DATABASE.

TYPE A SYSTEM NAME OR TYPE DONE.
>ORBIT

----- ORBIT PRACTICE -----

BEGIN BY USING NBR WITH THE TERM DISADVANTAGED.

```
SS 1/C?
USER:
>HELP

+       YOU SHOULD TYPE NBR DISAVANTAGED.                                +

SS 1/C?
USER:
>NBR DISADVANTAGED

PROG:

POSTINGS                TERM
   162                 DISADVANT/BI
     1                 DISADVANTAGE ENVIRONMENT/BI
 10888                 DISADVANTAGED/IT
     1                 DISADVANTAGED ADULTS/BI
   213                 DISADVANTAGED ENVIRONMENT/BI
UP N OR DOWN N?---HOW MANY TERMS UP OR DOWN?
```

ORBIT IS ASKING YOU IF YOU WANT TO VIEW MORE OF THE INDEX. IF NOT, SIMPLY ENTER ANY COMMAND OR SEARCH TERM. IF SO, YOU WOULD ENTER UP OR DOWN AND THEN THE NUMBER OF TERMS ALPHABETICALLY BEFORE OR AFTER THIS LIST THAT YOU WANT TO SEE. YOU CAN GO UP OR DOWN AS MANY AS 10 TERMS. TRY GOING DOWN 3. IF YOU JUST ENTER A NUMBER, DOWN WILL BE UNDERSTOOD.

```
UP N OR DOWN N?---HOW MANY TERMS UP OR DOWN?
USER:
>HELP
+   YOU SHOULD ENTER DOWN 3 OR JUST 3. DOWN WILL BE ASSUMED,             +
+   BUT IF YOU WANT TO GO UP, YOU MUST SPECIFY UP!                       +
UP N OR DOWN N?---HOW MANY TERMS UP OR DOWN?
USER:
>DOWN 3

PROG:
POSTINGS                TERM
     1                 DISADVANTAGED ENVIRONMENT COGNITIVE DEVELO/BI
  1395                 DISADVANTAGED GROUPS/BI
    83                 DISADVANTAGED SCHOOLS/BI
UP N OR DOWN N?---HOW MANY TERMS UP OR DOWN?
USER:
```

NBR IS THE ONLY COMMAND WHICH REACHES INTO ALL SEARCHABLE FIELDS. IT PRESENTS AN INTEGRATED DISPLAY OF ALL OCCURRENCES OF THE SEARCH TERM IN THE FILE. TRY REQUESTING A NBR DISPLAY ON THE NAME HIBBEN.

```
SS 1/C?
USER:

>HELP
+     TRY NBR HIBBEN                                                +

SS 1/C?
USER:

>NBR HIBBEN
```

IF YOU WERE TO ENTER NBR HIBBEN 6 YOU WOULD GET THE FOLLOWING SIX TERMS. (IF YOU DON'T SPECIFY A NUMBER, FIVE ITEMS ARE DISPLAYED.)

```
PROG:
POSTINGS                TERM
   1                  HIBBARD, R. R./AU
 782                  HIBBAYA/OS
   2                  HIBBEN, S./AU
  13                  HIBBEN, STUART/AU
  42                  HIBBEN INDUSTRIES/OS
  28                  HIBBEN TRANSFER PROCESS/BI
```

THIS UNIQUELY VALUABLE DISPLAY WOULD BE EVEN MORE USEFUL IF ITEMS WERE NUMBERED FOR YOUR CHOOSING. TO GET ALL ARTICLES BY STUART HIBBEN AND ALL THOSE ON THE PHENOMENON WHICH IS NAMED FOR HIM, YOU MUST RETYPE HIS NAME AND OTHER DESIRED TERMS FROM THE LIST. USE THE LOGICAL OR TO COMBINE TERMS ON ONE LINE.

```
UP N OR DOWN N?
USER:
```

```
>HELP
     YOUR BEST STRATEGY IS TO USE THE SHORTEST FORM OF THE NAME
     WHICH WILL GET ALL THE ARTICLES BY STUART HIBBEN, AND NO
     OTHERS: ALL HIBBEN:/AU WILL DO IT.
     YOU ALSO WANT THE SHORTEST FORM OF THE PROCESS NAME. SINCE
     YOUR DISPLAY DOESN'T GIVE YOU ANY IDEA OF THE NEXT TERM IN
     THE INDEX, YOU NEED TO USE THE COMPLETE TERM AS SHOWN.
     NOTE THAT YOU DO NOT NEED THE FIELD QUALIFIER.
     TRY AGAIN!
UP N OR DOWN N?
USER:

ALL HIBBEN:/AU AND HIBBEN TRANSFER PROCESS
+      IF YOU USE THE LOGICAL AND YOU WILL GET ONLY ARTICLES ON        +
+      THE TRANSFER PROCESS BY HIBBEN. TRY AGAIN.                      +
UP N OR DOWN N?
USER:

>ALL HIBBEN:/AU OR HIBBEN TRANSFER PROCESS
GOOD SHOW THERE,!
     NOW YOU HAVE IT! THIS IS A LITTLE BIT TRICKY SINCE YOU ARE
     OPTIMIZING DIFFERENT PROCESSES:
          1. MINIMIZING YOUR TYPING TIME, WHILE YOU
          2. ARE MAXIMIZING THE RECALL OF RELEVANT ITEMS; AND
          3. MINIMIZING THE NUMBER OF UNWANTED ITEMS RETRIEVED.
```

HAVE YOU GAINED AN UNDERSTANDING OF THE ORBIT PROMPT?

SS 1/C?
USER:

THIS IS SHORTHAND FOR: "ENTER SEARCH STATEMENT 1 OR A COMMAND." YOU USUALLY ENTER YOUR TERM WITHOUT ANY COMMAND WORD.

DISADVANTAGED GROUPS

PROG:
SS 1 PSTG(1395)

THE SYSTEM'S ANSWER TELLS YOU THAT 1395 ITEMS ARE INDEXED BY YOUR TERM WHICH HAS BEEN DESIGNATED SS 1 (SEARCH STATEMENT 1). PSTG MEANS POSTINGS.
SELECT THE SEARCH TERM DISADVANTAGED BELOW.

SS 2/C?
USER:
>HELP
+ ALL YOU NEED TO DO IS ENTER DISADVANTAGED. +

SS 2/C?
USER:
>DISADVANTAGED

PROG:
SS 2 PSTG(10888)

THERE ARE TIMES WHEN YOU MUST COMMAND ORBIT TO PERFORM THE SEARCH OPERATION. FOR EXAMPLE, YOU MIGHT WANT TO USE A SEARCH TERM WHICH ORBIT RECOGNIZES AS A COMMAND WORD.

SS 3/C?
USER:
FIND HISTORY

PROG:
SS 3 PSTG(1395)

AS YOU CAN SEE, THE NEXT SEQUENTIAL SS NUMBER WAS ASSIGNED TO THE TERM. TRY TO FIND "TIME".

SS 4/C?
USER:
>HELP

+ YOU SHOULD TYPE FIND OR FD FOLLOWED BY TIME. +

SS 4/C?
USER:
>FIND TIME

PROG:
SS 4 PSTG(10888)

ROOT SEARCHING AND CHARACTER SUBSTITUTION

To help you when you don't know what the variation in spelling or suffixes might be for your search term, ORBIT has two symbols, the # (hash mark) and the ? (colon). They may be used anywhere in the term, or following it.

- # stands for a single character or space at the place where it appears. It may be repeated to replace two or more spaces or characters.
- ? stands for any number of characters or no characters at the place where it appears.

How would you enter a search statement to retrieve all forms of the root CRYST?

```
SS 1/C?
USER:
>HELP
+      You should enter CRYST:                                    +

SS 1/C?
USER:
>CRYST:

PROG:
MM--MULTIMEANING (CRYST:)-(4)TERMS
     1 CRYSTAL/BI
     2 CRYSTALLOGRAPHIC/BI
     3 CRYSTALLOGRAPHY/BI
     4 CRYSTALS/TI
SPECIFY NUMBERS,ALL, OR NONE-
USER:
```

The ORBIT system shows you the above display of up to 20 terms that contain your specified initial stem. You now have 3 options:

1. You can type the individual reference numbers of each of the terms that you want to include in your search.

2. You can type ALL, and all the listed terms will be included in your search.

3. You can discontinue the search by typing NONE.

ORBIT insists that you answer this question before proceeding. Try typing ALL to include all terms.

SPECIFY NUMBERS, ALL, OR NONE-
USER:
>ALL
SS 1 PSTG(471)

THIS PROCEDURE IS USUALLY FASTER AND LESS EXPENSIVE THAN USING NBR. NOTICE THAT THE NUMBERED LIST ALLOWS YOU TO CHOOSE TERMS WITHOUT RETYPING THEM.

AN EVEN FASTER RESULT CAN BE OBTAINED BY USING ALL WHEN YOU ENTER THE TRUNCATED FORM. TRY ALL CRYST:

SS 2/C?
USER:
>ALL CRYST:

PROG:
SS 1 PSTG(471)

FOR THE FOLLOWING SUBJECT TERMS, DEVISE USEFUL TRUNCATED FORMS:
LABOR, LABOUR

SS 7/C?
USER:
>LAB:R
YOU'RE DOING FINE!

WOMAN, WOMEN

SS 8/C?
USER:
>WOM::\::↑U
WOM::N
GOOD,!
THEATRE, THEATER BUT NOT THE PLURAL FORMS

SS 9/C?
USER:
>THEAT::
CORRECT!
THEATER, THEATRE, THEATRICAL, ETC.

SS 10/C?
USER:
>THEAT:
GOOD SHOW THERE!
YOU CAN TYPE DIALOG OR SCORPIO TO PRACTICE BROWSING ON THOSE SYSTEMS, OR ORBIT TO REPEAT THIS PRACTICE.

TYPE A SYSTEM NAME OR TYPE DONE.
>DONE

NOW THAT YOU HAVE PRACTICED WITH THESE MEANS OF NEGOTIATING SEARCH TERMS, YOU CAN GO ON TO RUN A PRACTICE SEARCH ON THE TRAINING SYSTEM OF YOUR CHOICE USING WHAT YOU HAVE LEARNED.

----- END OF MODULE 5 -----

YOU CAN TYPE DIALOG OR SCORPIO TO PRACTICE BROWSING ON THOSE SYSTEMS, OR ORBIT TO REPEAT THIS PRACTICE.

TYPE A SYSTEM NAME OR TYPE DONE.
>ORBIT

----- ORBIT PRACTICE -----

BEGIN BY USING NBR WITH THE TERM DISADVANTAGED.

```
SS 1/C?
USER:
>NBR DISADVANTAGED

PROG:

POSTINGS                TERM
   162                  DISADVANT/BI
     1                  DISADVANTAGE ENVIRONMENT/BI
 10888                  DISADVANTAGED/IT
     1                  DISADVANTAGED ADULTS/BI
   213                  DISADVANTAGED ENVIRONMENT/BI
UP N OR DOWN N?---HOW MANY TERMS UP OR DOWN?
```

ORBIT IS ASKING YOU IF YOU WANT TO VIEW MORE OF THE INDEX. IF NOT, SIMPLY ENTER ANY COMMAND OR SEARCH TERM. IF SO, YOU WOULD ENTER UP OR DOWN AND THEN THE NUMBER OF TERMS ALPHABETICALLY BEFORE OR AFTER THIS LIST THAT YOU WANT TO SEE. YOU CAN GO UP OR DOWN AS MANY AS 10 TERMS. TRY GOING DOWN 3. IF YOU JUST ENTER A NUMBER, DOWN WILL BE UNDERSTOOD.

```
UP N OR DOWN N?---HOW MANY TERMS UP OR DOWN?
USER:
>DOWN 3

PROG:
POSTINGS                TERM
     1                  DISADVANTAGED ENVIRONMENT COGNITIVE DEVELO/BI
  1395                  DISADVANTAGED GROUPS/BI
    83                  DISADVANTAGED SCHOOLS/BI
UP N OR DOWN N?---HOW MANY TERMS UP OR DOWN?
USER:
```

NBR IS THE ONLY COMMAND WHICH REACHES INTO ALL SEARCHABLE FIELDS. IT PRESENTS AN INTEGRATED DISPLAY OF ALL OCCURRENCES OF THE SEARCH TERM IN THE FILE. TRY REQUESTING A NBR DISPLAY ON THE NAME HIBBEN.

```
SS 1/C?
USER:

>NBR HIBBEN
```

IF YOU WERE TO ENTER NBR HIBBEN 6 YOU WOULD GET THE FOLLOWING SIX TERMS. (IF YOU DON'T SPECIFY A NUMBER, FIVE ITEMS ARE DISPLAYED.)

```
PROG:
POSTINGS                TERM
   1                  HIBBARD, R. R./AU
 782                  HIBBAYA/OS
   2                  HIBBEN, S./AU
  13                  HIBBEN, STUART/AU
  42                  HIBBEN INDUSTRIES/OS
  28                  HIBBEN TRANSFER PROCESS/BI
```

THIS UNIQUELY VALUABLE DISPLAY WOULD BE EVEN MORE USEFUL IF ITEMS WERE NUMBERED FOR YOUR CHOOSING. TO GET ALL ARTICLES BY STUART HIBBEN AND ALL THOSE ON THE PHENOMENON WHICH IS NAMED FOR HIM, YOU MUST RETYPE HIS NAME AND OTHER DESIRED TERMS FROM THE LIST. USE THE LOGICAL OR TO COMBINE TERMS ON ONE LINE.

```
UP N OR DOWN N?
USER:

>ALLHIBBEN:/OR\RO\AU

+     YOU SHOULD USE   ALL HIBBEN:/AU OR HIBBEN TRANSFER PROCESS      +

UP N OR DOWN N?
USER:

>ALL HIBBEN:/AU OR HIBBEN TRANSFER PROCESS
EXCELLENT,!
```

NOW YOU HAVE IT! THIS IS A LITTLE BIT TRICKY SINCE YOU ARE OPTIMIZING DIFFERENT PROCESSES:

1. MINIMIZING YOUR TYPING TIME, WHILE YOU
2. ARE MAXIMIZING THE RECALL OF RELEVANT ITEMS; AND
3. MINIMIZING THE NUMBER OF UNWANTED ITEMS RETRIEVED.

HAVE YOU GAINED AN UNDERSTANDING OF THE ORBIT PROMPT?

SS 1/C?
USER:

THIS IS SHORTHAND FOR: "ENTER SEARCH STATEMENT 1 OR A COMMAND." YOU USUALLY ENTER YOUR TERM WITHOUT ANY COMMAND WORD.

DISADVANTAGED GROUPS

PROG:
SS 1 PSTG(1395)

THE SYSTEM'S ANSWER TELLS YOU THAT 1395 ITEMS ARE INDEXED BY YOUR TERM WHICH HAS BEEN DESIGNATED SS 1 (SEARCH STATEMENT 1). PSTG MEANS POSTINGS.
SELECT THE SEARCH TERM DISADVANTAGED BELOW.

SS 2/C?
USER:
>DISADVANTAGED

PROG:
SS 2 PSTG(10888)

THERE ARE TIMES WHEN YOU MUST COMMAND ORBIT TO PERFORM THE SEARCH OPERATION. FOR EXAMPLE, YOU MIGHT WANT TO USE A SEARCH TERM WHICH ORBIT RECOGNIZES AS A COMMAND WORD.

SS 3/C?
USER:
FIND HISTORY

PROG:
SS 3 PSTG(1395)

AS YOU CAN SEE, THE NEXT SEQUENTIAL SS NUMBER HAS ASSIGNED TO THE TERM. TRY TO FIND "TIME".

SS 4/C?
USER:
>FIND TIME

PROG:
SS 4 PSTG(10888)

ROOT SEARCHING AND CHARACTER SUBSTITUTION

To help you when you don't know what the variation in spelling or suffixes might be for your search term, ORBIT has two symbols, the # (hash mark) and the ? (colon). They may be used anywhere in the term, or following it.

- # stands for a single character or space at the place where it appears. It may be repeated to replace two or more spaces or characters.
- ? stands for any number of characters or no characters at the place where it appears.

How would you enter a search statement to retrieve all forms of the root CRYST?

```
SS 1/C?
USER:
>CRYST:

PROG:
MM--MULTIMEANING (CRYST:)-(4)TERMS
    1 CRYSTAL/BI
    2 CRYSTALLOGRAPHIC/BI
    3 CRYSTALLOGRAPHY/BI
    4 CRYSTALS/TI
SPECIFY NUMBERS,ALL, OR NONE-
USER:
```

The ORBIT system shows you the above display of up to 20 terms that contain your specified initial stem. You now have 3 options:

1. You can type the individual reference numbers of each of the terms that you want to include in your search.

2. You can type ALL, and all the listed terms will be included in your search.

3. You can discontinue the search by typing NONE.

ORBIT insists that you answer this question before proceeding. Try typing ALL to include all terms.

```
SPECIFY NUMBERS, ALL, OR NONE-
USER:
>ALL
SS   1   PST6(471)
```

This procedure is usually faster and less expensive than using NBR. Notice that the numbered list allows you to choose terms without retyping them.

```
     AN EVEN FASTER RESULT CAN BE OBTAINED BY USING ALL WHEN YOU ENTER
THE TRUNCATED FORM.  TRY ALL CRYST:

SS 2/C?
USER:
>ALL CRYST:

PROG:
SS    1    PST6(471)

FOR THE FOLLOWING SUBJECT TERMS, DEVISE USEFUL TRUNCATED FORMS:
     LABOR, LABOUR

SS 7/C?
USER:
>LAB:R
RIGHT ON,!

     WOMAN, WOMEN

SS 8/C?
USER:
>WOM#N
EXCELLENT,!
     THEATRE, THEATER BUT NOT THE PLURAL FORMS

SS 9/C?
USER:
>THEAT##
EXCELLENT,!
     THEATER, THEATRE, THEATRICAL, ETC.

SS 10/C?
USER:
>THEAT:
YOU'RE DOING FINE!
     YOU CAN TYPE DIALOG OR SCORPIO TO PRACTICE BROWSING ON THOSE
SYSTEMS, OR ORBIT TO REPEAT THIS PRACTICE.


     TYPE A SYSTEM NAME OR TYPE DONE.
>DONE

      NOW THAT YOU HAVE PRACTICED WITH THESE MEANS OF NEGOTIATING SEARCH
 TERMS, YOU CAN GO ON TO RUN A PRACTICE SEARCH ON THE TRAINING SYSTEM OF
 YOUR CHOICE USING WHAT YOU HAVE LEARNED.

     -----  END OF MODULE 5  -----


TYPE ONE OF THE FOLLOWING:
MODULE NUMBER
EMULATOR LETTER
L TO SEE THE LIST OF MODULES AND EMULATORS
EXIT TO RETURN TO THE SYSTEM MONITOR (AND LOGOFF USING K/F)
>EXIT
```

```
HELLO FROM PITT/ORBIT. (16-APR-79  10:23 22.0  LOCAL TIME)
YOU ARE NOW CONNECTED TO THE NTIS                    DATABASE.

 FOR A/TUTORIAL, ENTER A QUESTION MARK. OTHERWISE ENTER A COMMAND.

USER:
>?

PROG:

ON THIS SYSTEM YOU MUST RUN THE TRAINER MODULES.
OR A TRAINER TYPE STOP TO LOGOFF THE ORBIT EMULATOR.  THEN TYPE/R CTLYST
>TRAINER[134057,120121]

USER:
>NBR THOMAS

PROG:
POSTINGS    TERM
      4     THIRD/BI
      1     THIRST/BI
      1     THOM, BRUCE G./AU
      2     THOMAS, GARY S./AU
      1     THOMAS, J. B./AU
THOMAS                DOES NOT EXIST IN THE INDEX IN THIS FORM

UP N OR DOWN N?
USER:
>



7

PROG:
POSTINGS    TERM
      2     THOMAS, JOHN B./AU
      2     THOMAS, JOHN R./AU
      1     THOMAS, L. D./AU
      1     THOMAS, LOWELL D./AU
      1     THOMAS, R./AU
      1     THOMPSON, HELMER/AU
      1     THOMPSON, WILLIAM/AU
UP N OR DOWN N?
USER:
>
```

```
THOMAS:/AU

PROG:
 MM (THOMAS:/AU           ) (  7)
                     1  THOMAS, GARY S./AU
                     2  THOMAS, J. B./AU
                     3  THOMAS, JOHN B./AU
                     4  THOMAS, JOHN R./AU
                     5  THOMAS, L. D./AU
                     6  THOMAS, LOWELL D./AU
                     7  THOMAS, R./AU
 SPECIFY NUMBERS, ALL, OR NONE
USER:
>5,6

PROG:
SS  1 PSTGS ( 2)
SS  2/C?
USER:
>PRT

PROG:

AN-  C535468    FLD: 20H, 99F   GRAI7524
TI-  LOW-ENERGY ELECTRON SCATTERING BY ATOMIC OXYGEN,
AU-  AUTHOR: THOMAS, L. D.; NESBET, R. K.
PD-  4 SEP 74   6P

AN-  C535470    FLD: 20H, 99F   GRAI7524
TI-  EXPERIMENTAL AND (FIRST-ORDER MANY-BODY) THEORETICAL DIFFERENTIAL
      AND INTEGRAL CROSS SECTIONS FOR EXCITATION OF THE N = 3 STATES O
     F HE BY ELECTRON IMPACT AT 29.2 AND 39.7 EV,
AU-  AUTHOR: CHUTJIAN, ARA; THOMAS, LOWELL D.
PD-  11 DEC 74   16P
SS  2/C?
USER:
>
```

```
INTERNATIONAL RELATIONS

PROG:
SEARCH STATEMENT CONTAINS TOO MANY TERMS


SS  2/C?
USER:
>INTERNATIONAL AND RELATIONS

PROG:
SS  2 PSTGS ( 3)
SS  3/C?
USER:
>PRT AU,TI 3

PROG:

AU-  AUTHOR: SPECTOR, BERTRAM I.; BROWNELL, JAMES R. JR; HAYES, MARGAR
     ET DALY; KEYNON, GARY A.; MOORE, JAMES A.
TI-  QUANTITATIVE INDICATORS FOR DEFENSE ANALYSIS. VOLUME I. EXECUTIVE
      SUMMARY.

AU-  AUTHOR: SPECTOR, BERTRAM I.; BROWNELL, JAMES R. JR; HAYES, MARGAR
     ET DALY; KEYNON, GARY A.; MOORE, JAMES A.
TI-  QUANTITATIVE INDICATORS FOR DEFENSE ANALYSIS. VOLUME II. TECHNICA
     L REPORT.

AU-  AUTHOR: PETERSEN, CHARLES C.
TI-  THE SOVIET UNION AND THE REOPENING OF THE SUEZ CANAL: MINECLEARIN
     G OPERATIONS IN THE GULF OF SUEZ,
SS  3/C?
USER:
>
```

```
ALL FOUTS:/AU

PROG:
SS  3 PSTGS ( 1)
SS  4/C?
USER:
>PRT

PROG:

AN-  C535291     FLD: 9B, 1C, 51C, 62B   GRAI7524
TI-  SOFTWARE DESIGN AND VERIFICATION SYSTEM (SDVS).
AU-  AUTHOR: TRAINOR, W. LYNN; FORTH, C.; BURLAKOFF, MIKE; HERNEGH, P.
     ; SCHRAML, W.
SO-  INTERIM REPT. 16 JUN 74-30 JUN 75
PD-  AUG 75   46P
SS  4/C?
USER:
>

 .

TIME

PROG:
COMMAND NOT SUPPORTED

SS  4/C?
USER:
>FD TIME

PROG:
SS  4 PSTGS (10)
SS  5/C?
USER:
>FD TIME:

PROG:
 MM (TIME:                ) (  2)
                      1  TIME/BI
                      2  TIMES/BI
 SPECIFY NUMBERS, ALL, OR NONE
USER:
>NONE

PROG:
NP (TIME:                )

SS  5/C?
USER:
>ALL TIME:

PROG:
SS  5 PSTGS (10)
SS  6/C?
```

```
SS  7/C?
USER:
>TETRA***ORIDE

PROG:
SS  7 PSTGS ( 2)
SS  8/C?
USER:
>


CHEMO:

PROG:
 MM (CHEMO:                ) (  3)
                     1  CHEMORECEPTORS/BI
                     2  CHEMOTHERAPEUTIC/BI
                     3  CHEMOTHERAPY/BI
 SPECIFY NUMBERS, ALL, OR NONE
USER:
>


STOP

PROG:
SS  8/C?
USER:
>STOP

PROG:
ALL DONE? (YES/NO)
USER:
>Y

PROG:
GOOD-BYE!




STOP

END OF EXECUTION    FOROTS 5B(772)_
CPU TIME: 4.10  ELAPSED TIME: 9:5.55
EXIT
```

MODULE 6 -- USING LOGICAL OPERATORS

EACH OF THE SYSTEMS ON THIS TRAINING PACKAGE ALLOWS THE USE OF THE BOOLEAN LOGICAL OPERATORS AND, OR, AND NOT.

IF YOU WOULD LIKE TO KNOW A LITTLE MORE ABOUT THE LOGICAL OPERATORS AND HOW THEIR USE AFFECTS THE OUTCOME OF A SEARCH, JUST HIT THE RETURN KEY.

IF YOU WOULD LIKE TO GO DIRECTLY TO A FEW EXAMPLES AND EXERCISES SHOWING HOW THE OPERATORS ARE IMPLEMENTED ON A GIVEN SYSTEM, TYPE SKIP.

>

THE LOGICAL OPERATORS AND, OR, AND NOT, WHEN USED TO COMBINE SEARCH TERMS, CAN GREATLY AFFECT THE SIZE AND CONTENTS OF THE RESULTS OF A SEARCH.

WE WILL GO THROUGH A BRIEF REVIEW OF THE OPERATORS AND WHAT THEY MEAN BY USING THEM TO COMBINE THE TERMS ECLIPSE AND SOLAR.

OR

IF WE COMBINE THE TERMS USING OR (ECLIPSE OR SOLAR), WE WILL RETRIEVE ITEMS INDEXED BY THE TERM ECLIPSE, OR THE TERM SOLAR, OR BY BOTH TERMS.

AND

IF WE COMBINE THE TERMS USING AND (ECLIPSE AND SOLAR), WE WILL RETRIEVE ONLY THOSE ITEMS INDEXED BY BOTH THE TERM ECLIPSE AND THE TERM SOLAR. IF AN ITEM IS INDEXED BY ONLY ONE OF THE TWO, IT WILL NOT BE RETRIEVED.

NOT

IF WE COMBINE THE TERMS USING NOT (ECLIPSE NOT SOLAR IN DIALOG; OR ECLIPSE AND NOT SOLAR IN ORBIT), WE WILL RETRIEVE ONLY THOSE ITEMS INDEXED BY ECLIPSE THAT WERE NOT ALSO INDEXED BY SOLAR. (POSSIBLY ITEMS ON LUNAR ECLIPSES, ETC.).

THE USE OF OR TO COMBINE TERMS WILL USUALLY RESULT IN MORE ITEMS BEING RETRIEVED THAN WOULD BE THE CASE IF THE SAME TERMS WERE COMBINED USING AND OR NOT. TRY ORING SEVERAL SYNONYMOUS OR CLEARLY RELATED TERMS TOGETHER TO BROADEN YOUR SET. — FOR MORE ITEMS

IF, ON THE OTHER HAND, YOU ARE GETTING TOO MANY ITEMS AS A RESULT OF YOUR SEARCH, YOU CAN NARROW ITS SCOPE BY USING AND TO MAKE YOUR SEARCH MORE SPECIFIC, OR USING NOT TO ELIMINATE POSSIBLY RELATED AREAS THAT YOU ARE NOT CONCERNED WITH. — FOR FEWER ITEMS

THE SYSTEMS REPRESENTED ON THIS TRAINING PACKAGE ARE
DIALOG
ORBIT
BY TYPING ONE OF THE SYSTEM NAMES, YOU CAN SEE HOW THE LOGICAL OPERATORS ARE IMPLEMENTED ON THAT SYSTEM.

TYPE A SYSTEM NAME OR DONE.

>ORBIT

----- ORBIT PRACTICE -----

BELOW ARE THE LOGICAL OPERATORS IN ORDER OF THEIR PRIORITY FOR EXECUTION ON THE ORBIT SYSTEM.
1 AND
2 AND NOT
3 OR

IF THIS ISN'T YOUR FIRST TIME THROUGH, YOU CAN SKIP THE LIST OF MAJOR POINTS BY TYPING SKIP (OTHERWISE, JUST HIT <CR>).
>
THE FOLLOWING ARE THE BASIC IMPORTANT POINTS ABOUT THE IMPLEMENTATION OF THE OPERATORS ON THE ORBIT SYSTEM.

1. THE OPERATORS CAN BE USED TO COMBINE EITHER SEARCH STATEMENT NUMBERS, ACTUAL TERMS, OR A COMBINATION OF STATEMENT NUMBERS AND TERMS.

2. WHEN THERE ARE SEVERAL DIFFERENT TYPES OF LOGICAL OPERATORS IN ONE SEARCH STATEMENT, THE AND OPERATIONS WILL BE CARRIED OUT FIRST, THEN NOT, THEN OR.

3. IF THERE IS MORE THAN ONE OPERATOR OF THE SAME TYPE IN THE SAME SEARCH STATEMENT (E.G., TWO AND'S IN THE SAME STATEMENT), THE ORDER OF THEIR EXECUTION WILL BE LEFT TO RIGHT.

4. THE ORDER OF EXECUTION OF THE LOGICAL OPERATORS CANNOT BE CHANGED (ALTHOUGH THIS CAPABILITY SHOULD BE INTRODUCED WITHIN A YEAR, POSSIBLY BY THE USE OF BRACKETS). YOU MUST USE SEPARATE STATEMENTS TO JOIN ORED TERMS BEFORE ANDING THEM.

5. THERE ARE NOT ANY SYMBOLIC SUBSTITUTES FOR THE LOGICAL OPERATORS. (*,+, AND - ARE NOT USED.)

6. UNLIKE DIALOG, THE NOT OPERATOR MUST BE USED WITH AN AND OR OR, AS APPROPRIATE, WHEN THE NOT IS BETWEEN TWO TERMS.

A HISTORY OF THE FIRST FOUR STEPS IN AN ORBIT SEARCH SHOWS THESE RESULTS:

PROG:

SS 1: CHILDREN (1642)
SS 2: AGGRESSION (397)
SS 3: TELEVISION (1137)
SS 4: VIOLENCE (247)

IF WE WANTED THE SET OF ITEMS INDEXED BY BOTH CHILDREN AND TELEVISION, WE WOULD TYPE:

SS 5/C?
USER:
CHILDREN AND TELEVISION

OR WE COULD TYPE:

SS 5/C?
USER:
1 AND 3
(ALSO, 1 AND TELEVISION IS LEGAL, AS IS CHILDREN AND 3 .)

TRY TYPING A SEARCH STATEMENT TO RETRIEVE THE SET OF ITEMS INDEXED BY EITHER AGGRESSION OR VIOLENCE, OR BOTH OF THEM.

SS 6/C?
USER:
>HELP

+ TRY 2 OR 4 +

SS 6/C?
USER:
>2 OR 4
EXCELLENT,!

2 OR 4 IS ONE OF THE POSSIBLE ANSWERS. USE THE SS NUMBERS TO SAVE TYPING TIME.

THE HISTORY OR HIS COMMAND GIVES YOU A LISTING OF SETS YOU HAVE CREATED. TRY IT.

SS 5/C?
USER:
>HELP

+ HIS OR HISTORY WAS EXPECTED. +

SS 5/C?
USER:
>HISTORY

PROG:

SS 1: CHILDREN (1642)
SS 2: AGGRESSION (397)
SS 3: TELEVISION (1137)
SS 4: VIOLENCE (247)

USING THIS SET LISTING TO RETRIEVE THE SET OF ITEMS INDEXED BY EITHER AGGRESSION OR VIOLENCE, BUT NOT BY TELEVISION, WE WOULD PROCEED AS FOLLOWS:

SS 5/C?
USER:
2 OR 4

PROG:
PSTG---SS 5 NUMBER POSTINGS (500)

SS 6/C?
USER:
5 AND NOT 3

PROG:
PSTG---SS 6 NUMBER POSTINGS (352)

WE CONSTRUCT THE SEARCH STATEMENT IN TWO STEPS BECAUSE OF THE PRIORITY FOR EXECUTION OF THE LOGICAL OPERATORS. IF WE HAD TYPED:

USER:
2 OR 4 AND NOT 3

WE WOULD HAVE RETRIEVED A SET INDEXED EITHER BY THE TERM AGGRESSION OR BY THE COMBINATION OF THE TERMS VIOLENCE AND NOT TELEVISION.

TRY TYPING A STRATEGY TO RETRIEVE THE ITEMS INDEXED BY BOTH CHILDREN AND TELEVISION, BUT NOT BY AGGRESSION OR VIOLENCE.
(THIS MUST BE DONE IN THREE STEPS.)

```
SS 5/C?
USER:
>
```

```
1 AND 4

+       TRY 1 AND 3                                              +

SS 5/C?
USER:
>1 AND 3
GOOD SHOW THERE;!

PROG:
PSTG---SS 5 NUMBER POSTINGS (673)


SS 6/C?
USER:
>2 AND 4

+       TRY 2 OR 4                                               +

SS 6/C?
USER:
>2 OR 4
RIGHT ON!

PROG:
PSTG---SS 6  NUMBER POSTINGS (500)


SS 7/C?
USER:
>5 AND NOT 6
YOU'RE DOING FINE!
```

YOU SHOULD NOW HAVE A GOOD IDEA OF HOW THE LOGICAL OPERATORS ARE IMPLEMENTED ON THE ORBIT SYSTEM. AT THIS POINT, YOU CAN EITHER TYPE THE NAME OF ANOTHER SYSTEM TO SEE HOW THE OPERATORS ARE IMPLEMENTED ON IT, OR YOU CAN TYPE DONE TO GO ON TO ANOTHER MODULE.

TYPE A SYSTEM NAME OR DONE.

```
>DONE
```

YOU SHOULD NOW HAVE A GOOD IDEA OF HOW THE LOGICAL OPERATORS ARE IMPLEMENTED ON THE DIALOG SYSTEM. AT THIS POINT YOU CAN EITHER TYPE A SYSTEM NAME TO SEE HOW THE OPERATORS ARE IMPLEMENTED ON THAT SYSTEM OR, YOU CAN GO ON TO THE REST OF THIS MODULE BY TYPING DONE.

TYPE A SYSTEM NAME OR DONE.

>ORBIT

----- ORBIT PRACTICE -----

BELOW ARE THE LOGICAL OPERATORS IN ORDER OF THEIR PRIORITY FOR EXECUTION ON THE ORBIT SYSTEM.

1 AND
2 AND NOT
3 OR

IF THIS ISN'T YOUR FIRST TIME THROUGH, YOU CAN SKIP THE LIST OF MAJOR POINTS BY TYPING SKIP (OTHERWISE, JUST HIT <CR>).
>

A HISTORY OF THE FIRST FOUR STEPS IN AN ORBIT SEARCH SHOWS THESE RESULTS:

PROG:

SS 1: CHILDREN (1642)
SS 2: AGGRESSION (397)
SS 3: TELEVISION (1137)
SS 4: VIOLENCE (247)

IF WE WANTED THE SET OF ITEMS INDEXED BY BOTH CHILDREN AND TELEVISION, WE WOULD TYPE:

SS 5/C?
USER:
CHILDREN AND TELEVISION

OR WE COULD TYPE:

SS 5/C?
USER:
1 AND 3
(ALSO, 1 AND TELEVISION IS LEGAL, AS IS CHILDREN AND 3 .)

TRY TYPING A SEARCH STATEMENT TO RETRIEVE THE SET OF ITEMS INDEXED BY EITHER AGGRESSION OR VIOLENCE, OR BOTH OF THEM.

SS 6/C?
USER:
>2 OR 4
EXCELLENT!

2 OR 4 IS ONE OF THE POSSIBLE ANSWERS. USE THE SS NUMBERS TO SAVE TYPING TIME.

THE HISTORY OR HIS COMMAND GIVES YOU A LISTING OF SETS YOU HAVE CREATED. TRY IT.

```
SS 5/C?
USER:
>HISTORY

PROG:

SS 1:     CHILDREN  (1642)
SS 2:     AGGRESSION  (397)
SS 3:     TELEVISION  (1137)
SS 4:     VIOLENCE  (247)
```

USING THIS SET LISTING TO RETRIEVE THE SET OF ITEMS INDEXED BY EITHER AGGRESSION OR VIOLENCE, BUT NOT BY TELEVISION, WE WOULD PROCEED AS FOLLOWS:

```
SS 5/C?
USER:
2 OR 4

PROG:
PSTG---SS 5  NUMBER POSTINGS (500)

SS 6/C?
USER:
5 AND NOT 3

PROG:
PSTG---SS 6  NUMBER POSTINGS (352)
```

WE CONSTRUCT THE SEARCH STATEMENT IN TWO STEPS BECAUSE OF THE PRIORITY FOR EXECUTION OF THE LOGICAL OPERATORS. IF WE HAD TYPED:

```
USER:
2 OR 4 AND NOT 3
```

WE WOULD HAVE RETRIEVED A SET INDEXED EITHER BY THE TERM AGGRESSION OR BY THE COMBINATION OF THE TERMS VIOLENCE AND NOT TELEVISION.

TRY TYPING A STRATEGY TO RETRIEVE THE ITEMS INDEXED BY BOTH CHILDREN AND TELEVISION, BUT NOT BY AGGRESSION OR VIOLENCE.
(THIS MUST BE DONE IN THREE STEPS.)

```
SS 5/C?
USER:
>CHILDREN AND TELEVISION
GOOD,!

PROG:
PSTG---SS 5 NUMBER POSTINGS (673)


SS 6/C?
USER:
>AGRESSION OR VIOLENCE
```

245

```
SS 6/C?
USER:
>2 OR 4
CORRECT,!

PROG:
PSTG---SS 6  NUMBER POSTINGS (500)


SS 7/C?
USER:
>5 AND NOT 6
YOU'RE DOING FINE!


     YOU SHOULD NOW HAVE A GOOD IDEA OF HOW THE LOGICAL
OPERATORS ARE IMPLEMENTED ON THE ORBIT SYSTEM. AT THIS
POINT, YOU CAN EITHER TYPE THE NAME OF ANOTHER SYSTEM
TO SEE HOW THE OPERATORS ARE IMPLEMENTED ON IT, OR YOU
CAN TYPE DONE TO GO ON TO ANOTHER MODULE.


    TYPE A SYSTEM NAME OR DONE.

>DONE


TYPE ONE OF THE FOLLOWING:
MODULE NUMBER
EMULATOR LETTER
L TO SEE THE LIST OF MODULES AND EMULATORS
EXIT TO RETURN TO THE SYSTEM MONITOR (AND LOGOFF USING K/F)
>EXIT

IF YOU HAVE ANY QUESTIONS, COMMENTS, PROBLEMS:
AFTER THE MONITOR PROMPT (.) TYPE R MAIL AND FOLLOW THIS FORM:
 .R MAIL
TO:134057,120121
YOUR MESSAGE ENDING WITH CONTROL Z (↑Z)
TO:↑Z (USE ↑Z AFTER THE SECOND TO: TO EXIT FROM THE MAIL PROGRAM.)

YOU CAN RETRIEVE YOUR ANSWER BY RUNNING THE MAIL PROGRAM
AGAIN THE NEXT DAY.

↑C

EXIT

.K/F
JOB 27 [134057,120121] OFF TTY1    AT 1546 4-APR-79  CONNECT=36 MIN
DISK R+W=243+47  TAPE IO=0  SAVED ALL FILES (2166 BLOCKS)
CPU 0:15  CORE HWM=12P  UNITS=0.1030 ($7.73)
```

```
HELLO FROM PITT/ORBIT. (17-Apr-79  13:35 03.3  LOCAL TIME)
YOU ARE NOW CONNECTED TO THE NTIS                    DATABASE.

ARE YOU A NEW USER?  IF YES ENTER Y.  IF NO ENTER N OR A COMMAND.


USER:
>ANALYSIS OF QUANTITATIVE INDICATORS FOR NATIONAL DEFENSE OR ANALYSIS OF THE INT

ERACTION OF EVENTS

PROG:
SEARCH STATEMENT CONTAINS TOO MANY TERMS


SS  1/C?
USER:
>ANALYSIS

PROG:
SS  1 PSTGS (10)
SS  2/C?
USER:
>QUANTITATIVE

PROG:
SS  2 PSTGS ( 8)
SS  3/C?
USER:
>INDICATORS

PROG:
SS  3 PSTGS ( 6)
SS  4/C?
USER:
>NATIONAL

PROG:
SS  4 PSTGS (10)
SS  5/C?
USER:
>DEFENSE

PROG:
SS  5 PSTGS (10)
SS  6/C?
USER:
>INTERACTION
```

247

```
PROG:
SS  6 PSTGS (10)
SS  7/C?
USER:
>EVENTS

PROG:
NP (EVENTS                    )
*NONE-
SS  7/C?
USER:
>EVENT:

PROG:
 MM (EVENT:                   ) (  1)
                        1  EVENT/BI
 SPECIFY NUMBERS, ALL, OR NONE
USER:
>ALL

PROG:
SS  7 PSTGS ( 4)
SS  8/C?
USER:
>HIS

PROG:


SS  1:  ANALYSIS                                          (10)
SS  2:  QUANTITATIVE                                      ( 8)
SS  3:  INDICATORS                                        ( 6)
SS  4:  NATIONAL                                          (10)
SS  5:  DEFENSE                                           (10)
SS  6:  INTERACTION                                       (10)
SS  7:  EVENT:                                            ( 4)


SS  8/C?
USER:
>1 AND 2 AND 3 AND 4 AND 5

PROG:
NP ([ LOGICAL RESULT ]  )
*NONE-
SS  8/C?
USER:
>1 AND 2
```

```
PROG:
NP ([ LOGICAL RESULT ]  )
◆NONE-
SS  8/C?
USER:
>2 AND 3

PROG:
SS  8 PSTGS ( 6)
SS  9/C?
USER:
>4 AND 5

PROG:
SS  9 PSTGS ( 5)
SS 10/C?
USER:
>8 AND 9

PROG:
SS 10 PSTGS ( 4)
SS 11/C?
USER:
>HIS

PROG:


SS  1:  ANALYSIS                                    (10)
SS  2:  QUANTITATIVE                                ( 8)
SS  3:  INDICATORS                                  ( 6)
SS  4:  NATIONAL                                    (10)
SS  5:  DEFENSE                                     (10)
SS  6:  INTERACTION                                 (10)
SS  7:  EVENT:                                      ( 4)
SS  8:  2 AND 3                                     ( 6)
SS  9:  4 AND 5                                     ( 5)
SS 10:  8 AND 9                                     ( 4)


SS 11/C?
USER:
```

```
INTERACTION

PROG:
SS 11 PSTGS (10)
SS 12/C?
USER:
>7 AND 11

PROG:
SS 12 PSTGS ( 3)
SS 13/C?
USER:
>PRT

PROG:

AN-  C535317     FLD: 5D, 15C, 92E, 74   GRAI7524
TI-  QUANTITATIVE INDICATORS FOR DEFENSE ANALYSIS. VOLUME I. EXECUTIVE
       SUMMARY.
AU-  AUTHOR: SPECTOR, BERTRAM I.; BROWNELL, JAMES R. JR; HAYES, MARGAR
     ET DALY; KEYNON, GARY A.; MOORE, JAMES A.
SO-  FINAL REPT.
PD-  JUN 75   17P

AN-  C535318     FLD: 5D, 15C, 92E, 74   GRAI7524
TI-  QUANTITATIVE INDICATORS FOR DEFENSE ANALYSIS. VOLUME II. TECHNICA
     L REPORT.
AU-  AUTHOR: SPECTOR, BERTRAM I.; BROWNELL, JAMES R. JR; HAYES, MARGAR
     ET DALY; KEYNON, GARY A.; MOORE, JAMES A.
PD-  JUN 75   265P

AN-  C535535     FLD: 5D, 15C, 92E, 74   GRAI7524
TI-  QUANTITATIVE INDICATORS FOR DEFENSE ANALYSIS. VOLUME III. APPENDI
     CES.
AU-  AUTHOR: SPECTOR, BERTRAM I.; BROWNELL, JAMES R. JR; HAYES, MARGAR
     ET DALY; KEYNON, GARY A.; MOORE, JAMES A.
SO-  FINAL REPT.
PD-  JUN 75   150P
SS 13/C?
USER:
>
```

```
NBR HIBBEN

PROG:
POSTINGS    TERM
     2      HEXAFLUORIDE/BI
     2      HEXAGONAL/BI
     4      HF/BI
     1      HIBBEN, STUART G./AU
    10      HIGH/BI
HIBBEN                  DOES NOT EXIST IN THE INDEX IN THIS FORM

UP N OR DOWN N?
USER:
>ALL HIBBEN:/AU

PROG:
SS 15 PSTGS ( 1)
SS 16/C?
USER:
>TRANSFER AND PR\RP\PROCESS

PROG:
NP ([ LOGICAL RESULT ]  )
*NONE-
SS 16/C?
USER:
>TRANSRER AND ALL PROCESS:

PROG:
NP (TRANSRER              )
*NONE-
SS 16/C?
USER:
>ALL PROCESS:

PROG:
SS 16 PSTGS (20)
SS 17/C?
USER:
>TRANSFER
```

```
PROG:
SS 17 PSTGS (10)
SS 18/C?
USER:
>15 AND 16 AND 17

PROG:
NP ([ LOGICAL RESULT ] )
*NONE-
SS 18/C?
USER:
>PRT SS 16

PROG:

AN-  C535552    FLD: 7D, 99F   GRAI7524
TI-  THE RAMAN SPECTRUM OF (TMA)2UCL6 AND (TMA)2SNCL6 CRYSTALS AND OF
     TMACL IN SOLUTION,
AU-  AUTHOR: VON DER OHE, W.
PD-  23 DEC 74   15P

AN-  C535203    FLD: 11B, 71D   GRAI7524
TI-  FUNDAMENTAL AND PRACTICAL EVALUATION OF THE CERAMIC FINISHING PRO
     CESS.
AU-  AUTHOR: GIELISEE, P. J.; KIM, T. J.; GOYETTE, L. F.; NAGARKAR, R.
      V.
SO-  FINAL TECHNICAL REPT. 15 NOV 72-15 NOV 74
PD-  15 NOV 74   114P

AN-  C535645    FLD: 11F, 71J   GRAI7524
TI-  EVALUATION OF 410 STAINLESS STEEL PRODUCED BY THE WATTS PROCESS.
 ↑O
PRT 2\2\SS 15

PROG:

AN-  C535241    FLD: 20E, 46C   GRAI7524
TI-  BIBLIOGRAPHY OF SOVIET LASER DEVELOPMENTS.
AU-  AUTHOR: HIBBEN, STUART G.; MINKUS, CARL
SO-  SCIENTIFIC INTERIM REPT. JAN-MAR 75
PD-  22 SEP 75   119P
SS 18/C?
USER:
>
```

```
FIND TIME

PROG:
SS 18 PSTGS (10)
SS 19/C?
USER:
>TIME

PROG:

PROG:
SECOND OR THIRD LEVEL COMMAND:  INDEX= 8
COMMAND NOT SUPPORTED


SS 19/C?
USER:
>PRT SS 18 TI 10

PROG:

TI-  A Model for the Current Pulses of Cloud-to-Ground Lightning Disch
     arges,

TI-  Fast Convolution by Number Theoretic Transforms.

TI-  A Model for the Current Pulses of Cloud-to-Ground Lightning Disch
     arges,

TI-  Real-Time Tactical Operating Systems Study.

TI-  Noise-Equivalent Power and Response Time of TlSe Bolometer at 1.5
     K,

TI-  Stability and the Infinite-Time Quadratic Cost Problem for Linear
      Hereditary Differential Systems,

TI-  Time Functions Appropriate for Some Aftershocks of the Point Mugu
     , California Earthquake of February 21, 1973,

TI-  Estimating the Variance of Time Averages,

TI-  On the Modeling of Systems for Identification. Part II. Time-Vary
     ing Systems,

TI-  Uses of Time-Compressed Speech in a Reading Remediation Program:
     Some Exploratory Tests.
SS 19/C?
USER:
>STOP

PROG:
ALL DONE? (YES/NO)
USER:
>YES

PROG:
GOOD-BYE!
```

. . . .

>ORBIT

----- ORBIT PRACTICE -----

THE FILES OF THE ONLINE DATABASE SHOW MUCH VARIATION; WE ADVISE YOU TO KEEP THE QUICK REFERENCE GUIDE AT HAND. IF YOU HAVE A COPY, SEE THE STATEMENT ON THE PRINT COMMAND IN THE ORBIT COMMANDS SECTION AND LOCATE THE ERIC AND NTIS FILE DESCRIPTIONS.

SUPPOSE YOU HAVE JUST COMPLETED A SEARCH AND YOU WANT BIBLIOGRAPHIC DATA FOR A FEW ITEMS. HOW WOULD YOU REQUEST IT?

SS 2/C?
USER:
>HELP

+ JUST PRT OR PRINT WILL DO IT. +

SS 2/C?
USER:
>PRT OR PRINT

+ JUST PRT OR PRINT WILL DO IT. +

SS 2/C?
USER:
>PRT

PROG:

TI- LET A COMPUTER DESIGN MEMORY CIRCUITS
AU- SHIVA, S.G.; NAGLE, H. TROY JR.
AA- AUBURN UNIV, ALA
SO- ELECTRON DES V22 N23 NOV 8 1974 P 122-127
AN- 00-006194

(FOUR MORE RECORDS WOULD FOLLOW)

YOU MAY SPECIFY THE NUMBER OF DOCUMENTS IF YOU WISH; IF YOU FAIL TO DO SO THE PRT COMMAND AUTOMATICALLY PRINTS FIVE DOCUMENT RECORDS.

FOR A QUICK SURVEY TO ASSESS THE ADEQUACY OF YOUR CURRENT SEARCH STATEMENT, WHICH COMMAND WOULD YOU USE?

SS 2/C?
USER:
>HELP

+ PRT TRIAL WILL DO IT. +

```
SS 2/C?
USER:
>PRT TRIAL

PROG:

TI- BEHAVIOR MOD: HOW TO KEEP THE GOOD?
DE- *BEHAVIOR CHANGE;*BEHAVIOR PROBLEMS;*COUNSELING;*LEGAL
    AID;*LEGAL PROBLEMS;ATTITUDES;LEARNING
ID- BEHAVIOR MODIFICATION;PATIENTS RIGHTS

(ONE MORE WOULD FOLLOW)
```

PRT TRIAL GIVES YOU TWO RECORDS UNLESS YOU SPECIFY A PARTICULAR NUMBER.

HOW WOULD YOU GET A PRINT WHICH WOULD INCLUDE ANY ABSTRACT ON AN ERIC RECORD?

```
SS 3/C?
USER:
>HELP

+     TRY PRT FULL.                                                +


SS 3/C?
USER:
>PRT FULL

PROG:

ED- EJ104800
CH- SE511848
TI- BEHAVIOR MOD: HOW TO KEEP THE GOOD?
PD- SEP 74
SO- SCIENCE NEWS; 106; 10; 151
DE- *BEHAVIOR CHANGE
DE- *BEHAVIOR PROBLEMS
DE- *COUNSELING
DE- *LEGAL AID
DE- ATTITUDES
DE- LEARNING
AB- RESULTS OF SEVERAL BEHAVIOR MODIFICATION PROGRAMS ARE
    DESCRIBED. LEGAL CONCERNS HAVE ARISEN REGARDING
    WHETHER INDIVIDUALS MUST CONSENT TO TREATMENT. DR.
    MICHAEL LERNER, A KANSAS CITY LAWYER, SAYS CONSENT MUST
    BE GIVEN. (RH)
```

SINCE ABSTRACTS USE MUCH ONLINE TIME ORBIT PRINTS ONLY ONE RECORD UNLESS YOU REQUEST A PARTICULAR NUMBER.

SUPPOSE YOU HAD ISSUED A SIMPLE PRT OR PRINT COMMAND, AND NOW YOU WANT TO SEE JUST THE INDEX TERMS ASSIGNED TO THE FIVE DOCUMENTS FOR WHICH YOU HAVE ALREADY SEEN THE BIBLIOGRAPHIC DATA.

```
SS 5/C?
USER:
>HELP

+     TRY PRT IT.                                                    +

SS 5/C?
USER:
>PRT IT
RIGHT!
```

TRY TO SEE TWO MORE RECORDS WHEN YOU HAVE JUST FINISHED LOOKING AT FIVE.

```
SS 3/C?
USER:
>HELP

+     USE PRT 2 SKIP 5                                               +

SS 3/C?
USER:
>PRT 2 SKIP 5
CORRECT!
```

CONSTRUCT A PRINT COMMAND TO VIEW ONLY AUTHORS AND TITLES OF 5 ITEMS FROM YOUR CURRENT SEARCH.

```
SS 3/C?
USER:
>HELP

+     TRY PRT AU, TI  (REMEMBER TO USE THE COMMA!)                   +

SS 3/C?
USER:
>PRT AU, TI
GOOD SHOW THERE,!
```

FOLLOWING THE ORBIT PROMPT, REQUEST AN ABSTRACT FROM AN EARLIER SS 3.

```
SS 5/C?
USER:
>HELP

+     USE PRT AB SS 3                                                    +


SS 5/C?
USER:
>PRT AB SS 3
RIGHT ON!
```

THE OFFLINE PRINT COMMANDS FOR THE ORBIT SYSTEM ARE BASICALLY EXTENSIONS OF THE ONLINE COMMANDS. OFFLINE PRINTING IS ESPECIALLY USEFUL FOR OUTPUTTING LARGE NUMBERS OF ITEMS, AND WHEN NO OTHER MEANS OF GETTING HARD-COPY OUTPUT IS AVAILABLE (AS WHEN YOU ARE USING AN EXCLUSIVELY CRT TYPE TERMINAL).

TO HAVE ITEMS PRINTED OFFLINE, THE TERM OFFLINE IS ADDED TO ANY PRINT COMMAND. FOR EXAMPLE:

```
PROG:
SS   4    PSTG(553)

SS 5/C?
USER:
PRT FULL OFFLINE
```

ALL 553 ITEMS FROM SS 4 WILL THUS BE PRINTED IN THE PRINT FULL FORMAT OFFLINE.

THE SS NUMBER FROM WHICH THE ITEMS ARE PRINTED CAN BE CHANGED IN THE SAME WAY THAT IT IS CHANGED WITH THE ONLINE COMMANDS. CHANGING THE NUMBER OF ITEMS TO BE PRINTED IS ALSO THE SAME AS WITH THE ONLINE COMMANDS. HOWEVER, WHEN THERE ARE MORE THAN 1000 ITEMS, THE SKIP OPTION MUST BE USED IN ORDER TO PRINT THE SECOND THOUSAND.

257

To go over what we have said about offline printing; assume that we have:

```
SS 1:  DISCIPLINE   (294)
SS 2:  1 AND SCHOOLS  (123)
SS 3:  CORPOREAL PUNISHMENT  (0)
```

Type in the command to have all of the items in SS 2 printed offline in the PRINT FULL format.

```
SS 4/C?
USER:
>PRT FULL OFFLINE SS 2

PROG:
NAME?--ENTER NAME
USER:
```

After you have entered a print offline of any sort, the ORBIT program will request mailing data from you, unless you have a previously stored address and use the STORAD option. See the ORBIT USER MANUAL for the use of STORAD.

The simplest way to end your ORBIT search session, and the only way that will be discussed here, is to use the STOP command.

This command erases all Search Statements and other interactions. It signals the program that the searcher's connect-time accounting should be discontinued, and all searches should be erased.

Try using STOP below:

```
SS 3/C?
USER:
>HELP

+       Type STOP                                                    +

SS 3/C?
USER:
>STOP

PROG:
ALL DONE?--(YES/NO)

USER:
>HELP
+      When you type NO, ORBIT returns you to                        +
+      search mode and restarts your connect-time accounting.        +
+        Type YES                                                    +
```

PROG:
ALL DONE?--(YES/NO)

USER:
>YES

PROG:
PLEASE HANG UP YOUR TELEPHONE NOW.
GOOD-BYE!

YOU ARE THUS OFF THE ORBIT SYSTEM.

NOW THAT YOU HAVE FINISHED WITH THIS ORBIT MATERIAL, KEEP IN MIND THAT WE HAVE ONLY COVERED THE BASICS. TO GO INTO ANY DEPTH IT IS REALLY NECESSARY TO CONSULT THE ORBIT USER MANUAL.
YOU CAN NOW EITHER GO TO THE MATERIALS ON ANOTHER SYSTEM BY TYPING THE SYSTEM NAME, OR END THIS MODULE BY TYPING DONE.

TYPE THE NAME OF THE SYSTEM YOU WANT TO WORK WITH, OR TYPE DONE:

>DONE
THE MATERIAL PRESENTED HERE ON THESE PROCEDURES HAS BEEN SIMPLE AND BRIEF. THERE ARE MANY DETAILS AND VARIATIONS ON EACH PROCEDURE WHICH YOU CAN LOOK UP IN THE BRIEF GUIDE OR QUICK REFERENCE WHEN YOU ARE READY TO USE THEM. YOU CAN PRACTICE ALL DIALOG AND ORBIT OUTPUT COMMANDS ON THE A AND B MODULES.

----- END OF MODULE 7 -----

TYPE ONE OF THE FOLLOWING:
MODULE NUMBER
EMULATOR LETTER
L TO SEE THE LIST OF MODULES AND EMULATORS
EXIT TO RETURN TO THE SYSTEM MONITOR (AND LOGOFF USING K/F)
>EXIT

IF YOU HAVE ANY QUESTIONS, COMMENTS, PROBLEMS:
AFTER THE MONITOR PROMPT (.) TYPE R MAIL AND FOLLOW THIS FORM:
.R MAIL
TO:134057,120121
YOUR MESSAGE ENDING WITH CONTROL Z (↑Z)
TO:↑Z (USE ↑Z AFTER THE SECOND TO: TO EXIT FROM THE MAIL PROGRAM.)

YOU CAN RETRIEVE YOUR ANSWER BY RUNNING THE MAIL PROGRAM AGAIN THE NEXT DAY.

TOTAL ELAPSED TIME FOR THIS LESSON IS 0:34:48.3

EXIT

```
>ORBIT
        -----  ORBIT Practice  -----

     The files of the online database show much variation; we advise
you to keep the Quick Reference Guide at hand.  If you have a copy,
see the statement on the PRINT command in the ORBIT COMMANDS section
and locate the ERIC and NTIS file descriptions.

     Suppose you have just completed a search and you want bibliо-
graphic data for a few items.  How would you request it?

SS 2/C?
USER:
>PRINT

PROG:

TI- LET A COMPUTER DESIGN MEMORY CIRCUITS
AU- SHIVA, S.G.; NAGLE, H. TROY JR.
AA- AUBURN UNIV, ALA
SO- ELECTRON DES Y22 N23 NOV 8 1974  P 122-127
AN- 00-006194

(FOUR MORE RECORDS WOULD FOLLOW)

     You may specify the number of documents if you wish; if
you fail to do so the PRT command automatically prints five
document records.

     For a quick survey to assess the adequacy of your current search
statement, which command would you use?

SS 2/C?
USER:
>

PRT TRIAL

PROG:

TI- BEHAVIOR MOD: HOW TO KEEP THE GOOD?
DE- *BEHAVIOR CHANGE;*BEHAVIOR PROBLEMS;*COUNSELING;*LEGAL
    AID;*LEGAL PROBLEMS;ATTITUDES;LEARNING
ID- BEHAVIOR MODIFICATION;PATIENTS RIGHTS

(ONE MORE WOULD FOLLOW)

     PRT TRIAL gives you two records unless you specify a particular
number.
```

How would you get a print which would include any abstract on an ERIC record?

```
SS 3/C?
USER:
>PRT FULL

PROG:

ED- EJ104800
CH- SE511848
TI- BEHAVIOR MOD: HOW TO KEEP THE GOOD?
PD- SEP 74
SO- SCIENCE NEWS; 106; 10; 151
DE- *BEHAVIOR CHANGE
DE- *BEHAVIOR PROBLEMS
DE- *COUNSELING
DE- *LEGAL AID
DE- ATTITUDES
DE- LEARNING
AB- RESULTS OF SEVERAL BEHAVIOR MODIFICATION PROGRAMS ARE
    DESCRIBED. LEGAL CONCERNS HAVE ARISEN REGARDING
    WHETHER INDIVIDUALS MUST CONSENT TO TREATMENT. DR.
    MICHAEL LERNER, A KANSAS CITY LAWYER, SAYS CONSENT MUST
    BE GIVEN. (RH)
```

Since abstracts use much online time ORBIT prints only one record unless you request a particular number.

Suppose you had issued a simple PRT or PRINT command, and now you want to see just the index terms assigned to the five documents for which you have already seen the bibliographic data.

```
SS 5/C?
USER:
>PRT IT
Right on!
```

Try to see two more records when you have just finished looking at five.

```
SS 3/C?
USER:
>PRT 2 SKIP 5
Excellent!
```

Construct a PRINT command to view only authors and titles of 5 items from your current search.

```
SS 3/C?
USER:
>PRT AU, TI
Good show there,!
```

Following the ORBIT prompt, request an abstract from an earlier SS 3.

```
SS 5/C?
USER:
>PRT AB SS 3
You're doing fine,!
```

The OFFLINE print commands for the ORBIT system are basically extensions of the online commands. Offline printing is especially useful for outputting large numbers of items, and when no other means of getting hard-copy output is available (as when you are using an exclusively CRT type terminal).

To have items printed offline, the term OFFLINE is added to any print command. For example:

```
PROG:
SS   4   PSTG(553)

SS 5/C?
USER:
PRT FULL OFFLINE
```

All 553 items from SS 4 will thus be printed in the PRINT FULL format offline.

The SS number from which the items are printed can be changed in the same way that it is changed with the online commands. Changing the number of items to be printed is also the same as with the online commands. However, when there are more than 1000 items, the SKIP option must be used in order to print the second thousand.

To go over what we have said about offline printing; assume that we have:

SS 1: DISCIPLINE (294)
SS 2: 1 and SCHOOLS (123)
SS 3: CORPOREAL PUNISHMENT (0)

Type in the command to have all of the items in SS 2 printed offline in the PRINT FULL format.

SS 4/C?
USER:
>PRT FULL OFFLINE SS 2

PROG:
NAME?--ENTER NAME
USER:

After you have entered a print offline of any sort, the ORBIT program will request mailing data from you, unless you have a previously stored address and use the STORAD option. See the ORBIT USER MANUAL for the use of STORAD.

The simplest way to end your ORBIT search session, and the only way that will be discussed here, is to use the STOP command.

This command erases all Search Statements and other interactions. It signals the program that the searcher's connect-time accounting should be discontinued, and all searches should be erased.
Try using STOP below:

SS 3/C?
USER:
>STOP

PROG:
ALL DONE?--(YES/NO)

USER:
>YES

PROG:
PLEASE HANG UP YOUR TELEPHONE NOW.
GOOD-BYE!

You are thus off the ORBIT system.

```
SS 13/C?
USER:
>PRT FULL SKIP 4

PROG:

AN-  C535588     FLD: 5I, 92A    GRAI7524
TI-  SELF-PACED INSTRUCTION IN A COGNITIVELY ORIENTED SKILLS COURSE: S
     UPPLYMAN, MOS 76Y10.
AU-  AUTHOR: HUNGERLAND, JACKLYN E.; TAYLOR, JOHN E.
SO-  TECHNICAL REPT.
DE-  IDENTIFIERS: *SELF PACED TRAINING, NTISDODA
CA-  AD-A015 474/0ST    NTIS PRICES: PC$3.75/MF$2.25
PD-  JUN 75    37P
AB-  ABSTRACT:AS PART OF THE ARMY'S ADOPTION OF PERFORMANCE-ORIENTED I
     NSTRUCTION IN ARMY TRAINING CENTERS, A STUDY WAS CONDUCTED TO DET
     ERMINE THE FEASIBILITY OF USING SELF-PACED INSTRUCTION WITHOUT PR
     OGRAMED TEXTS IN A CLERICAL AND COMPUTATIONAL↑□
PRT FULL SKIP8

PROG:

AN-  C535588     FLD: 5I, 92A    GRAI7524
TI-  SELF-PACED INSTRUCTION IN A COGNITIVELY ORIENTED SKILLS COURSE: S
     UPPLYMAN, MOS 76Y10.
AU-  AUTHOR: HUNGERLAND, JACKLYN E.; TAYLOR, JOHN E.
SO-  TECHNICAL REPT.
DE-  IDENTIFIERS: *SELF PACED TRAINING, NTISDODA
CA-  AD-A015 474/0ST    NTIS PRICES: PC$3.75/MF$2.25
PD-  JUN 75    37P
AB-  ABSTRACT:AS PART OF THE ARMY'S ADOPTION OF PERFORMANCE-ORIENTED I
     NSTRUCTION IN ARMY TRAINING CENTERS, A STUDY WAS CONDUCTED TO DET
     ERMINE THE FEASIBILITY OF USING SELF-PACED INSTRUCTION WITHOUT PR
↑□
```

```
RAT: AND LABORATOR:

PROG:
 MM (RAT:                    ) (  6)
                      1  RAT/BI
                      2  RATE/BI
                      3  RATES/BI
                      4  RATI/BI
                      5  RATIO/BI
                      6  RATS/BI
 SPECIFY NUMBERS, ALL, OR NONE
USER:
>1,6

PROG:
 MM (LABORATOR:              ) (  2)
                      1  LABORATORIES/BI
                      2  LABORATORY/BI
 SPECIFY NUMBERS, ALL, OR NONE
USER:
>ALL

PROG:
NP ([ LOGICAL RESULT ]  )
*NONE-
SS 13/C?
USER:
>ALL LABORATOR:

PROG:
SS 13 PSTGS ( 9)
SS 14/C?
USER:
>PRT

PROG:

AN-  C535242     FLD: 6L, 15E, 95G, 74E   GRAI7524
TI-  DESIGN CRITERIA FOR SHIPBOARD MEDICAL SPACES, SEPTEMBER 1975.

AU-  AUTHOR: MERKLE, FRANCIS B.
SO-  TECHNICAL REPT. JUL-AUG 75
PD-  SEP 75   40P

AN-  C535207     FLD: 5I, 9B, 92A   GRAI7524
TI-  THE COMPUTER AS A TUTORIAL LABORATORY: THE STANFORD BIP PROJECT.

AU-  AUTHOR: BARR, AVRON; BEARD, MARIAN; ATKINSON, RICHARD C.
SO-  TECHNICAL REPT.
PD-  22 AUG 75   70P
```

```
AN-  C535482     FLD: 13H, 14B    GRAI7524
TI-  CONSIDERATIONS WHEN EMPLOYING STEPPER MOTORS FOR AUTOMATING LABOR
     ATORY SYSTEMS.
AU-  AUTHOR: DENTON, M. B.; ROUTH, M. W.; MACK, J. D.; SWARTZ, D. B.

SO-  TECHNICAL REPT.
PD-  12 SEP 75    25P

AN-  C535495     FLD: 20L, 11F, 11D, 10B, 46D, 71    GRAI7524
TI-  ANNUAL TECHNICAL REPORT, MATERIALS RESEARCH LABORATORY, JULY 1, 1
     973-JUNE 30, 1974.
PD-  30 JUN 74    127P

AN-  C535678     FLD: 13B, 50B, 89C    GRAI7524
TI-  TEMPORARY ENCLOSURES AND HEATING DURING CONSTRUCTION: A CASE STUD
     Y OF THE LABORATORY BUILDING ADDITION, UNIVERSITY OF ALASKA.
AU-  AUTHOR: BENNETT, F. LAWRENCE
SO-  SPECIAL REPT.
PD-  SEP 75    40P
SS 14/C?
USER:
>PRT TRIAL 1 SKIP 8

PROG:

TI-  ESTIMATION OF CARDIAC OUTPUT BY ANALYSIS OF RESPIRATORY GAS EXCHA
     NGE.
DE-  IDENTIFIERS: NTISDODXR, NTISDODN
SS 14/C?
USER:
>
```